ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA–HQ–OAR–2003–0119; FRL–9991–32–OAR]

RIN 2060–AT84

Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Technical Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Following requests for clarification of its June 2016 final action, the Environmental Protection Agency (EPA) published proposed amendments to several provisions of the 2016 New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Commercial and Industrial Solid Waste Incineration (CISWI). This action finalizes the proposed amendments, which provide clarity and address implementation issues in the final CISWI NSPS and EG, as well as correcting inconsistencies and errors in these provisions.

DATES: This final rule is effective on April 16, 2019. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of February 7, 2013.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2003–0119. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *https://www.regulations.gov*, or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

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SUPPLEMENTARY INFORMATION: *Acronyms and Abbreviations.* A number of acronyms and abbreviations are used in this preamble. While this may not be an exhaustive list, to ease the reading of this preamble and for reference purposes, the following terms and acronyms are defined:

ACI air curtain incinerator
CAA Clean Air Act
CEDRI Compliance and Emissions Data Reporting Interface
CEMS Continuous Emissions Monitoring System
CFR Code of Federal Regulations
CISWI Commercial and Industrial Solid Waste Incineration
CO carbon monoxide
COMS Continuous Opacity Monitoring System
CPMS Continuous Parameter Monitoring System
EG Emission Guidelines
EPA U.S. Environmental Protection Agency
ESP electrostatic precipitator
HCl hydrogen chloride
Hg mercury
mg/dscm milligrams per dry standard cubic meter
NAICS North American Industry Classification System
NESHAP National Emission Standards for Hazardous Air Pollutants
NHSM Non-Hazardous Secondary Material(s)
NSPS New Source Performance Standards
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PC Portland Cement
ppmv parts per million by volume
ppmvd parts per million by dry volume
RIN Regulatory Information Number
UMRA Unfunded Mandates Reform Act
U.S.C. United States Code

Organization of this Document. The following outline is provided to aid in locating information in this preamble.

I. General Information

A. Does this action apply to me?

Categories and entities affected by the final action are those that operate CISWI units. The NSPS and EG, herein after referred to as ''standards,'' for CISWI affect the following categories of sources:

Category	NAICS [1] code	Examples of potentially regulated entities
Any industrial or commercial facility using a solid waste incinerator.	211, 212, 486	Oil and gas exploration operations; Mining, pipeline operators.
	221	Utility providers.

Category	NAICS [1] code	Examples of potentially regulated entities
	321, 322, 337	Manufacturers of wood products; Manufacturers of pulp, paper, and paperboard; Manufacturers of furniture and related products.
	325, 326	Manufacturers of chemicals and allied products; Manufacturers of plastics and rubber products.
	327	Manufacturers of cement; Nonmetallic mineral product manufacturing.
	333, 336	Manufacturers of machinery; Manufacturers of transportation equipment.
	423, 44	Merchant wholesalers, durable goods; Retail trade.

[1] North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by the final action. To determine whether your facility will be affected by this action, you should examine the applicability criteria in 40 Code of Federal Regulations (CFR) 60.2010 of subpart CCCC, 40 CFR 60.2505 of subpart DDDD, and 40 CFR 241. If you have any questions regarding the applicability of the final action to a particular entity, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Where can I get a copy of this document and other related information?

The docket number for this final action regarding the CISWI Technical Amendments is Docket ID No. EPA–HQ–OAR–2003–0119.

In addition to being available in the docket, an electronic copy of this action is available on the internet. Following signature by the Administrator, the EPA will post a copy of this final action at *https://www.epa.gov/stationary-sources-air-pollution/commercial-and-industrial-solid-waste-incineration-units-ciswi-new*. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at the same website.

C. Judicial Review

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) by June 17, 2019. Under CAA section 307(d)(7)(B), only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Any person who believes the final rule contains provisions that were not reasonably forseeable based on the proposed rule should submit a Petition for Reconsideration to the Office of the Administrator, Environmental Protection Agency, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to the persons listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460. Note, under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

II. Background

A. What is the statutory authority for taking this action?

Section 129 of the CAA requires the EPA to establish NSPS and EG pursuant to sections 111 and 129 of the CAA for new and existing solid waste incineration units located at commercial and industrial facilities. This action amends standards developed under these authorities.

B. Background Information

On March 21, 2011, the EPA promulgated revised NSPS and EG for CISWI units (*i.e.,* solid waste incineration units located at commercial or industrial facilities). Following that action, the Administrator received petitions for reconsideration that identified certain issues that warranted further opportunity for public comment. In response to the petitions, the EPA reconsidered, proposed revisions to, and requested comment on several provisions of the March 2011 final NSPS and EG for CISWI units. These proposed revisions were published on December 23, 2011 (76 FR 80452).

On February 7, 2013, the EPA finalized revisions to the CISWI NSPS and EG (78 FR 9112). In that final action, the EPA made additional revisions in response to comments that had not been proposed in the December 23, 2011, **Federal Register** document. Subsequently, the EPA received petitions for reconsideration of the final 2013 action. These petitions assert that the public did not have sufficient opportunity to comment on some of the provisions contained in that final rule. In response, the EPA proposed to reconsider four provisions of the 2013 final revisions to the NSPS and EG for CISWI units (80 FR 3018, January 21, 2015). The EPA took final action on that proposal on June 23, 2016 (81 FR 40956). We will refer to this final CISWI rule, as revised through June 2016, as the 2016 CISWI rule.

Following promulgation of the 2016 CISWI rule, the EPA received requests from industry stakeholders and implementing agencies to clarify various issues with implementation of the standards. In addition, the EPA identified certain testing and monitoring issues and inconsistencies within the rules that required further clarification or correction. On June 15, 2018, the EPA proposed amendments to several provisions of the 2016 CISWI rule to address these issues (83 FR 28068). In addition, the EPA identified additional regulatory provisions, beyond those raised by the requests from industry stakeholders and implementing agencies, that require clarification and editorial correction to address inconsistencies and errors in the final rules. In this document, the EPA is taking final action on the June 2018 proposal by promulgating clarifying changes and corrections to the 2016 CISWI rule.

For more detailed background and additional information on how this rule is related to other CAA combustion rules issued under CAA section 112 and the Resource Conservation and Recovery Act definition of solid waste, refer to the prior final actions discussed above (76 FR 15704, March 21, 2011; 78 FR 9112, February 7, 2013).

III. Summary of Final Action

In this final rule, we are amending the 2016 CISWI rule to address certain

issues raised by industry stakeholders and implementing agencies, as well as to address other issues identified during implementation of the CISWI rule. Provisions affected by the amendments are: (1) Alternative equivalent emission limit for mercury (Hg) for the waste-burning kiln subcategory; (2) timing of initial test and initial performance evaluation; (3) extension of the date by which electronic data reporting requirements must be met; (4) clarification of non-delegated authorities; (5) demonstration of initial and continuous compliance when using a continuous emissions monitoring system (CEMS); (6) continuous opacity monitoring requirements; (7) other CEMS requirements; (8) clarification of skip testing requirements; (9) deviation reporting requirements for continuous monitoring data; and (10) clarification of air curtain incinerator (ACI) requirements. In addition to these provisions, we are also correcting minor typographical errors identified in the rule as noted in section V.B of this preamble.

This final rule provides meaningful burden reduction by providing regulated facilities additional time to complete initial compliance demonstrations and by allowing facilities to comply with production-based emission limits in lieu of the concentration-based limits in the 2016 CISWI rule. Specifically, cement kilns would be allowed to report mercury emissions on a mass-based production basis (pounds per million (lb/MM) ton of clinker) in lieu of reporting on a concentration based limit (milligrams per dry standard cubic meter (mg/dscm)). This alternative provision may result in lower costs for the cement industry by making the format of the mercury emission limits consistent with the Portland Cement NESHAP (PC NESHAP). Further, the rule adds flexibilities in the compliance demonstration process by extending the timeline for performance evaluation tests from 60 days to 180 days and allows facilities to use CEMS for demonstrating initial compliance. These provisions may lower compliance testing costs as stack testing could be avoided if the facilities use CEMS. Moreover, facilities with CEMS will not be required to retest in the event of original stack testing failure.

The EPA is taking final action on all the amendments discussed in the June 15, 2018 (83 FR 28068), proposed rule and also making two additional changes to clarify provisions of the 2016 CISWI rule. A more detailed discussion of the rationale behind the technical amendments is located in section V.A of this preamble.

A. EG 30-Day Rolling Average Provisions

A commenter noted that the 30-day rolling average language found in 40 CFR 60.2710(c) was inconsistent with how the averaging period is defined elsewhere in the rule because it contained the additional qualifier ''over the previous 30 days of operation.'' The EPA realizes that units may not necessarily operate continuously, and that valid operating data exclude periods when a unit is not operating. The EPA has removed the phrase ''over the previous 30 days of operation'' from 40 CFR 60.2710(c) to be consistent with similar provisions elsewhere in the EG and in the NSPS.

B. Clarification of Operating Parameter Monitoring for a Pollutant's Control When CEMS are Being Used for Continuous Compliance Demonstration for the Pollutant

The EPA is clarifying that continuous operating parameter monitoring is not required when CEMS are used for direct and continuous compliance demonstrations for the pollutant. *See* section V.A.5 of this preamble for further discussion.

IV. Public Comments

Public comments on the proposed rule and the EPA's responses to these comments are addressed in a separate response to comment document, available in the docket for this action at Docket ID No. EPA–HQ–OAR–2003–0119.

V. Rationale for Final Amendments to 2016 CISWI Rule

A. Discussion of Final Technical Amendments

This section of the preamble explains the basis for the changes in this final rule.

1. Alternative Equivalent Emission Limit for Hg for the Waste-Burning Kiln Subcategory

The December 23, 2011, proposed CISWI reconsideration rule preamble discussed and presented equivalent emission limits for waste-burning kilns expressed on a production basis (76 FR 80458). In the February 2013 CISWI final reconsideration rule preamble, the EPA again included these equivalent production-based limits, but at that time the EPA decided not to codify these within the rule text. In the process of approving state plans to implement the CISWI EG, the EPA has recognized that there is a benefit to some affected sources and implementing agencies in codifying the emission limit for Hg for waste-burning kilns expressed as a production-based limit (*i.e.,* lb/MM ton clinker) as an alternative equivalent standard to the existing concentration-based standard (*i.e.,* mg/dscm), because this is the format of the Hg standards found in the PC NESHAP. The EPA strives to make compliance with both CISWI standards and the PC NESHAP as streamlined and consistent as possible to facilitate compliance with both standards because these sources (and energy recovery units) must comply with the CISWI standard when they are combusting solid waste and must comply with the PC NESHAP or Boiler Maximum Achievable Control Technology standards, as applicable, when combusting nonwaste materials. Having an equivalent emission limit in the same units as the PC NESHAP will, thus, aid affected sources in demonstrating compliance with both standards, and will aid implementing agencies in enforcing the standards.

As discussed in 2011 and repeated in 2013 (78 FR 9122–3, February 7, 2013), the Hg emission limit of 58 lb/MM ton clinker and 21 lb/MM ton clinker for existing and new sources, respectively, are equivalent to the concentration-based Hg standards of 0.011 mg/dscm and 0.0037 mg/dscm within the currently published 2016 CISWI rule. To facilitate use of the equivalent production-based emission limits, the EPA is adding these emission limits to the emission limitation tables, and including recordkeeping, calculation, and reporting requirements for clinker production rate as necessary. The regulatory provisions and calculations being made final are consistent with those found in the PC NESHAP, *see* 40 CFR 63, subpart LLL.

2. Timing of Initial Test and Initial Performance Evaluation

The current CISWI NSPS and EG (2016 CISWI Rule) require affected sources to conduct a performance evaluation of each continuous monitoring system within 60 days of installation of the monitoring system (see 40 CFR 60.2135 and 60.2700). The rule also allows up to 180 days from the final compliance date for affected sources to conduct an initial performance test. The EPA received questions from implementing agencies asking whether these requirements can be synchronized to prevent duplicate testing requirements because the continuous monitoring system performance evaluation would require an emissions test being conducted at the same time regardless. We recognize that

the requirement to conduct a performance evaluation within 60 days of installation could present a situation for sources where the deadline for conducting the performance evaluation would precede the deadline for conducting the initial performance test. The EPA did not intend to require sources to conduct duplicative initial performance tests, and we see a benefit to sources and implementing agencies to be able to schedule and conduct both of these demonstrations at the same time. Therefore, the EPA is adjusting the timing of the continuous monitoring system initial performance evaluation to allow 180 days from installation to match the schedule which is allowed for conducting the initial performance test. The EPA has determined that making these timelines consistent (*i.e.,* 180 days from installation) will streamline compliance demonstrations and prevent possible duplicative testing requirements.

3. Extension of Electronic Data Reporting Requirement

In this action, the EPA is extending the electronic reporting requirement dates found in 40 CFR 60.2235(a) and 60.2795(a). The electronic reporting provisions promulgated in CISWI require submittal of initial, annual, and deviation reports electronically through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which is accessed through the EPA's Central Data Exchange. The existing rule provides that the requirement for electronic submittal will take effect once the relevant forms have been available in CEDRI for 90 calendar days. As stated in the CISWI reconsideration (81 FR 40956), the EPA intended to make the requirements of the CISWI rule consistent with the *Electronic Reporting and Recordkeeping Requirements for New Source Performance Standards,* which was proposed on March 20, 2015 (80 FR 15100).[1] However, the CISWI reconsideration final rule was published on June 23, 2016 (81 FR 40956), before the *Electronic Reporting and Recordkeeping Requirements for New Source Performance Standards* rule [2] was finalized and did not take into account comments received on that rule.

The extension for CISWI units in this action is consistent with the EPA's approach to electronic reporting outlined in the *Electronic Reporting and Recordkeeping Requirements for New Source Performance Standards* final rule.[3] This approach has also been used in recent EPA rulemakings (*e.g., National Emissions Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi Chemical Pulp Mills,* 82 FR 47328 (October 11, 2017); *National Emissions Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works Residual Risk and Technology Review,* 82 FR 49513, October 26, 2017). The extension requires electronic submission of initial, annual, and deviation reports 2 years from publication of the final rule or 1 year after the reporting form becomes available in CEDRI, whichever date is later. This extension is necessary to allow the EPA time to develop and adequately test the new forms and for regulated entities to become familiar with the forms and reprogram systems that collect data for periodic reports once the forms are available. The extension also allows state, local, and tribal agencies more time to implement electronic reporting and to make any needed permit revisions to accommodate electronic reporting and allows for development of third-party software to populate the reporting forms.

4. Clarification of Non-Delegated Authorities

In this action, the EPA is making final corrections to the authorities listed in 40 CFR 60.2030(c). Specifically, the reference to 40 CFR 60.2125(j) is an outdated reference to previously proposed, but never promulgated, performance test waiver provisions. These provisions were included in the June 4, 2010, CISWI proposed rule (*see* 75 FR 31975), but were not made final in the March 21, 2011, final rule (*see* 76 FR 15752–3). This reference was inadvertently not included in the final rule to reflect that the proposed 40 CFR 60.2125(j) was not finalized. Another correction relates to the provisions of 40 CFR 60.2030(c)(10) that require obtaining a determination from the EPA of whether a qualifying small power facility or cogeneration facility is combusting homogeneous waste. We intended to remove these provisions in the 2013 CISWI final rule as part of the removal of the definition of homogeneous waste (*see* 78 FR 9124, February 7, 2013). As discussed in the preamble to the February 7, 2013, final revision action, the EPA determined that the proposed ''definition and provisions could be interpreted in a manner that would be unduly restrictive.'' Therefore, the EPA did not include a definition of ''homogeneous waste'' in the final CISWI rule and the Agency stated it was (without actually amending the CFR text to reflect its intent) ''removing the requirement that qualifying small power producers and qualifying cogeneration facilities that combust solid waste obtain a determination from the EPA that such waste is homogeneous.'' *Id.* Accordingly, the EPA is removing paragraph 40 CFR 60.2030(c)(10). While no other authorities have been added or removed from this list, the EPA is making minor revisions to streamline the section by removing the reserved subparagraphs *(i.e.,* (5) and (10)) and renumbering the subparagraphs sequentially.

In this action, we are also clarifying, with respect to the EG, which authorities will not be delegated. Language in 40 CFR 60.2542 simply contains a reference to the analogous paragraph (40 CFR 60.2030(c)) within the CISWI NSPS. However, since the CISWI NSPS applies to new sources, applicability of these non-delegated authorities to state plans implementing the emission guidelines for existing sources was unclear to implementing agencies. To remove this confusion, we have eliminated the cross reference to 40 CFR 60.2030(c) and have instead provided the specific details on which authorities will not be delegated within the text of 40 CFR 60.2542. The final list of authorities in 40 CFR 60.2542 matches the updated list found in 40 CFR 60.2030(c), with the appropriate adjustments made to subpart section cross references.

5. Demonstrating Initial Compliance When Using CEMS

As the EPA noted at proposal, (*see* 83 FR 28072, June 15, 2018), the provisions regarding CEMS monitoring for demonstrating initial compliance are inconsistent and somewhat unclear. The final CISWI rules require some sources to demonstrate compliance using CEMS, and allow the option for any source to use CEMS to demonstrate compliance ''with any of the emission limits of this subpart'' (*see* 40 CFR 60.2145(u) and 60.2710(u)). However, for most of the

[1] Originally, the *Electronic Reporting and Recordkeeping Requirements for New Source Performance Standards* rule included CISWI as one of the affected subparts. However, because the CISWI reconsideration package was proposed at nearly the same time as that rule, CISWI was removed as an affected subpart, and the language associated with the *Electronic Reporting and Recordkeeping Requirements for New Source Performance Standards* rule was inserted into the CISWI reconsideration proposal.

[2] This final rule was signed on December 21, 2016, but was withdrawn from the Office of the Federal Register prior to publication.

[3] The prepublication version of the final rule is available at *https://www.epa.gov/sites/production/files/2017-04/documents/e-reporting-nsps-final-rule-pre-publication.pdf.* Accessed November 15, 2018.

paragraphs containing the pollutant-specific CEMS requirements, the language was unclear on whether these demonstrations were applicable to demonstrating initial compliance, with the exception of carbon monoxide (CO). The EPA's intent was to allow CEMS for demonstrating initial compliance for any pollutant (*i.e.,* with any of the emission limits of this subpart). To express the EPA's intent of providing this flexibility for compliance demonstration more clearly, we have revised several sections of the rule in this final action. For example, the initial compliance requirements in 40 CFR 60.2135 and 60.2700 have been revised to also reflect use of CEMS data as an initial compliance demonstration alternative to an emissions test, provided that the initial CEMS performance evaluation has been conducted prior to collecting CEMS data used for the initial performance test. Likewise, language surrounding the CEMS requirements found in 40 CFR 60.2145, 60.2165, 60.2710, and 60.2730, and the emission limitation tables, has been revised and streamlined to clarify that CEMS data may be used to demonstrate compliance *(i.e.,* initial and continuing) with the standards.

In addition to clarifying initial compliance demonstrations using CEMS, commenters suggested a similar issue occurs with continuous parametric monitoring requirements for sources that use CEMS to demonstrate compliance for a pollutant. It was not the EPA's intent to require duplicative operating parameter monitoring for pollutants if emissions for the pollutants are directly and continuously monitored using CEMS. Therefore, the EPA has clarified the CEMS requirements in 40 CFR 60.2165 and 40 CFR 60.2730 to indicate that sources using CEMS to monitor for a pollutant are not required to monitor the associated operating parameters unless it is necessary for compliance with the monitoring requirements of another regulated pollutant. This clarification is not removing any monitoring requirements, but only acknowledging that direct pollutant emission measurement with CEMS is a suitable, if not even preferential, alternative to continuous parameter monitoring.

6. Clarification of Continuous Opacity Monitoring System (COMS) Requirements

In addition to the clarifications to CEMS provisions, we are also revising 40 CFR 60.2145(i) and 60.2710(i) to clarify our intent regarding the types of units required to install COMS and to make it consistent with the COMS monitoring requirement language found in 40 CFR 60.2165(m) and 60.2730(m), respectively. We are adding language clarifying that energy recovery units between 10 and 250 million British thermal units/hour design heat input that are equipped with electrostatic precipitators (ESP), particulate matter CEMS, or particulate matter continuous parameter monitoring systems (CPMS) are not required to additionally install and operate COMS because these units have an air pollution control device that has continuous parameter monitoring requirements or are using continuous particulate matter monitoring compliant with provisions within the rule already (*see* 40 CFR 60.2145(q), for example). The rule currently excludes the COMS requirement for energy recovery units using other types of particulate matter control devices or that use particulate matter CEMS for continuous particulate matter monitoring, but inadvertently omitted ESPs and particulate matter CPMS from the list. Therefore, we are adding ''electrostatic precipitator'' and ''particulate matter CPMS'' to the list (that currently includes CO wet scrubbers and fabric filters) found in 40 CFR 60.2165(m) and 60.2730(m) as types of units that do not require COMS. As a further clarification, we are also amending the text to 40 CFR 60.2145(i) and 60.2710(i) to clearly specify that the COMS requirement is applicable to units within the specified size range ''that do not use a wet scrubber, fabric filter with bag leak detection system, an electrostatic precipitator, particulate matter CEMS, or particulate matter CPMS.''

7. Clarification of Other CEMS Requirements

In addition to the CEMS-related requirements discussed above, the EPA is making two other CEMS-related clarifications in this final rule: (1) To not require CO CEMS for new waste-burning kilns; and (2) to remove outdated notification requirements when particulate matter CEMS are being used. For the CO CEMS issue, the rule as finalized in February 7, 2013, erroneously includes a requirement at 40 CFR 60.2145(j) for new waste-burning kilns to demonstrate compliance with CO emission limits using CEMS. This issue was not corrected in the 2016 final rules and is inconsistent with the requirements found in Table 7 to 40 CFR 60, subpart CCCC, and with the EPA's intent to remove CO CEMS requirements for new CISWI sources, as stated in the February 7, 2013, final CISWI rules (*see* 78 FR 9120). Carbon monoxide CEMS are allowed as an alternative compliance demonstration, but sources who adopt this alternative are not required to conduct annual testing using EPA Method 10. To make this clarification, the EPA is revising 40 CFR 60.2145(j) to reflect that CO is one of the pollutants for which an annual test is required and removing CO from the list of pollutants requiring CEMS for demonstrating compliance.

Regarding the removal of outdated notification requirements when particulate matter CEMS are used, the EPA is removing the outdated requirements to notify the Administrator prior to beginning and stopping use of an optional particulate matter CEMS. These provisions are 40 CFR 60.2165(n)(1) and (2), and 40 CFR 60.2730(n)(1) and (2). These provisions are an inadvertent holdover from model provisions from a prior rule. CEMS technology and application has progressed to an extent that these notifications are no longer needed or desired by the EPA. Furthermore, these notifications do not appear in the reporting requirements outlined in the reporting requirement tables (Table 4 to 40 CFR part 60, subpart CCCC and Table 3 to 40 CFR part 60, subpart DDDD), nor the other notification requirements, so they introduced an unintended inconsistency within the rule. To resolve this, we are deleting the current subparagraphs (1) and (2) of these sections and renumbering the remaining subparagraphs sequentially to streamline these requirements.

8. Clarification of Reduced Testing Requirements

It has come to the EPA's attention that there is confusion regarding how reduced testing is applied after a source has demonstrated good performance and has skipped testing for 2 years (*see* 40 CFR 60.2155 and 60.2720). Stakeholders suggest that the current CISWI rule language would have a good-performing source return to an annual testing schedule after being able to skip testing for 2 years, with no opportunity for additional reduced testing. It was not the EPA's intent to only offer this allowance once when developing these provisions. To the contrary, the EPA intended this allowance to be available for as long as good performance could be reaffirmed with testing every 3 years instead of annually (*see* 76 FR 15714, March 21, 2011). The intended sequence of testing consisted of two consecutive annual tests showing 75 percent or less of the applicable standard is achieved; followed by 2 years of testing being skipped; followed by an annual test showing that 75 percent of the standard is achieved; followed by 2 years of

testing being skipped; etc. In other words, starting with the initial compliance test (first year), for the first and second years, a source would perform compliance testing; for the third and fourth years, the source could skip testing (if both the first and second-year results showed that the source achieves 75 percent or less of the applicable standard); for the fifth year a source would perform compliance testing; for the sixth and seventh years, the source could skip testing (if the fifth-year results showed that the source achieves 75 percent or less of the applicable standard); for the eighth year, a source would perform compliance testing, and so on. Since the promulgation of these standards, these skip testing provisions have been refined and promulgated during regulatory development efforts in the CAA section 129 rulemakings for sewage sludge incinerators (40 CFR part 60, subparts LLLL and MMMM). In this action, the EPA is clarifying the ongoing allowance for reduced testing provisions we intended, based largely on language used in the recent sewage sludge incinerator rule (*see* 81 FR 26039, April 29, 2016).

9. Clarification of Deviation Reporting Requirements for Continuous Monitoring Data

The EPA has become aware of some unclear requirements in the deviation reporting requirements of 40 CFR 60.2215(a) and 60.2775(a). In particular, the requirements for continuously measured parameters or emissions using CEMS are not clearly outlined within these sections. While these provisions are clear for 3-hour average parameters and performance testing, the EPA recognizes that 30-day averages allowed for energy recovery units and particulate matter CEMS were inadvertently omitted, as well as requirements for any other 30-day average measured using CEMS that deviated from an emission limit. The EPA is adding language to these paragraphs to clarify that deviations for these other operating parameters or CEMS measurements that deviate from an operating limit or emissions limitation must be included in a deviation report.

10. Clarification of ACI Requirements

Since promulgation of the 2016 CISWI final rule, the EPA has received various questions from implementing agencies regarding the applicability of CISWI to ACI. While the limited requirements of ACIs burning only wood waste, clean lumber, or a mixture of wood waste, clean lumber, and/or yard waste are defined within the rule, ACIs' status as a CISWI-affected source is unclear to some implementing agencies as they work to prepare state plans and negative declarations because of confusing language in the 2016 CISWI Rule. *See* 40 CFR 60.2550. Specifically, the section of the EG addressing the units subject to the final CISWI rule includes a reference to ACI in 40 CFR 60.2550(a)(1), but 40 CFR 60.2550(a)(2) further states that only units that meet the definition of a CISWI unit are subject to the final rule, and ACIs do not meet the regulatory definition of a CISWI unit.[4]

Notwithstanding that provision, the record demonstrates that the EPA considers ACIs located at commercial and industrial facilities and otherwise meeting the definition of an ACI as being CISWI-affected sources. *See* CAA section 129(g)(1)(C) (defining ACIs) and 40 CFR 60.2245–2260 of the NSPS and 60.2810–2870 of the EG (setting forth the CISWI EG requirements applicable to ACI). Facilities can have CISWI-affected ACIs even if they do not have CISWI units located at the facility. If an ACI begins burning solid waste as defined in the *Non Hazardous Secondary Materials* rule (*see* 40 CFR part 241) in addition to, or instead of, wood waste, clean lumber, or a mixture of wood waste, clean lumber, and/or yard waste, it is a solid waste incineration unit that is subject to the applicable numerical emission standards contained in CISWI or another CAA section 129 standard, depending on the type of waste combusted (*e.g.,* such as a unit burning more than 30-percent municipal solid waste would be a municipal solid waste incineration unit instead of a CISWI unit).

The EPA's intent is further demonstrated in a response to comment on title V permitting requirements for ACIs in the preamble to the March 21, 2011, final CISWI rule (76 FR 15741):

Commenters are correct that ACIs are not solid waste incineration units pursuant to CAA section 129(g)(1)(C), but that is only correct if the units ''only burn wood wastes, yard wastes and clean lumber and [they] * * * comply with opacity limitations to be established by the Administrator by rule.'' The EPA has established opacity limitations for ACIs pursuant to CAA sections 111 and 129.

Pursuant to CAA section 502(a), sources subject to standards or regulations under CAA section 111 must obtain a title V permit; therefore, ACIs are required to obtain a title V permit. As commenters note, the EPA may exempt minor and area sources from the requirement to obtain a title V permit, but the EPA must first determine that compliance with title V requirements is ''impracticable, infeasible, or unnecessarily burdensome'' for the sources before exempting them (CAA section 502(a)). The EPA has not made the necessary finding pursuant to CAA section 502(a) for ACIs in any of the CAA section 129 rulemakings, and we believe that ACIs exist at CAA section 129 facilities other than at the commercial and industrial facilities subject to this final rule. Because we think it is important to treat all ACIs in the same manner, we decline to consider a title V exemption for minor and area source ACIs at commercial and industrial facilities.

As the record demonstrates, the EPA determined that ACIs located at commercial and industrial facilities are CISWI-affected sources that must be included in state plans and regulated consistent with the final CISWI standards applicable to such units. To address the uncertainty created by the CISWI rule, the EPA is clarifying the affected source status of ACIs by revising the regulations to make clear that ''air curtain incinerators'' do not need to meet the definition of a ''CISWI unit'' to be subject to the CISWI rule (40 CFR 60.2010 of the NSPS and 40 CFR 60.2500 and 60.2550 of the EG).

B. Typographical Errors and Corrections

In this action, we are also revising the final rule to correct minor typographical errors and clarify provisions that are unclear. The list of these changes is included in the *Typographical Errors and Corrections for Final Technical Amendments* memorandum in Docket ID No. EPA–OAR–HQ–2003–0119.

C. Environmental, Energy, and Economic Impacts

This action makes technical and clarifying corrections to aid in implementation and compliance, but does not make substantive changes to the February 7, 2013, final CISWI rule (78 FR 9112).[5] As such, there are no environmental, energy, or economic impacts associated with this final action. The impacts associated with the CISWI rule were discussed in detail in

[4] The phrasing of the regulations at 40 CFR 60.2010 and 60.2015 of the NSPS similarly confuse the applicability of the final CISWI rule to new ACIs located at commercial and industrial facilities.

[5] The June 23, 2016, final CISWI rule amendments (81 FR 40956) also did not entail any environmental, energy or economic impacts, and therefore the February 7, 2013, final CISWI rule presents the impacts associated with the CISWI rule.

the February 7, 2013, final CISWI rule document.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by providing additional regulatory flexibilities that address several implementation issues raised by the stakeholders.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB Control number 2060–0662 for 40 CFR part 60, subpart CCCC, and OMB Control number 2060–0664 for 40 CFR part 60, subpart DDDD. This action is believed to result in no changes to the information collection requirements of the 2016 CISWI rule, so that the information collection estimate of project cost and hour burden from the 2016 CISWI Rule have not been revised.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. This final rule will not impose any new requirements on any entities because it does not impose any additional regulatory requirements relative to those specified in the 2016 CISWI rule, which also did not impose any additional regulatory requirements beyond those specified in the February 2013 final CISWI rule. The February 2013 final CISWI rule was certified as not having a significant economic impact on a substantial number of small entities. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments, or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. The EPA is not aware of any CISWI in Indian country or owned or operated by Indian tribal governments. The CISWI aspects of this rule may, however, invoke minor indirect tribal implications to the extent that entities generating solid wastes on tribal lands could be affected. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (58 FR 7629, February 16, 1994).

It does not affect the level of protection provided to human health or the environment. The final corrections do not relax the control measures on sources regulated by the 2016 CISWI rule, which also did not relax any control measures on sources regulated by the February 2013 final CISWI rule. Therefore, this final action will not cause emissions increases from these sources. The February 2013 final CISWI rule reduced emissions of all the listed toxics emitted from this source, thereby helping to further ensure against any disproportionately high and adverse human health or environmental effects on minority or low-income populations.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference.

Dated: March 18, 2019.

Andrew R. Wheeler,

Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency is amending title 40, chapter I, of the Code of Federal Regulations as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

§ 60.17 [Amended]

■ 2. Amend § 60.17 by:

■ a. In paragraph (g)(14), by removing ''60.2710(s), (t), and (w),''and adding, it its place, ''60.2710(s) and (t),''; and
■ b. In paragraph (h)(190), by removing ''tables 1, 5,'' and adding, in its place, ''tables 5,''.

■ 3. Revise subpart CCCC to read as follows:

Sec.

Subpart CCCC—Standards of Performance for Commercial and Industrial Solid Waste Incineration Units

Introduction

§ 60.2000 What does this subpart do?

This subpart establishes new source performance standards for commercial and industrial solid waste incineration units (CISWIs) and air curtain incinerators (ACIs).

§ 60.2005 When did this subpart become effective?

This subpart became effective on August 7, 2013. Some of the requirements in this subpart apply to planning the CISWI or ACI (*i.e.,* the preconstruction requirements in

§§ 60.2045 and 60.2050). Other requirements such as the emission limitations and operating limits apply after the CISWI or ACI begins operation.

Applicability

§ 60.2010 Does this subpart apply to my incineration unit?

Yes, this subpart applies if your incineration unit meets all the requirements specified in paragraphs (a) through (c) of this section:

(a) Your incineration unit is a new incineration unit as defined in § 60.2015;

(b) Your incineration unit is a CISWI as defined in § 60.2265, or an ACI as defined in § 60.2265; and

(c) Your incineration unit is not exempt under § 60.2020.

§ 60.2015 What is a new incineration unit?

(a) A new incineration unit is an incineration unit that meets any of the criteria specified in paragraphs (a)(1) through (3) of this section:

(1) A CISWI or ACI that commenced construction after June 4, 2010;

(2) A CISWI or ACI that commenced reconstruction or modification after August 7, 2013; and

(3) Incinerators and ACIs, as defined in this subpart, that commenced construction after November 30, 1999, but no later than June 4, 2010, or that commenced reconstruction or modification on or after June 1, 2001, but no later than August 7, 2013, are considered new incineration units and remain subject to the applicable requirements of this subpart until the units become subject to the requirements of an approved state plan or federal plan that implements subpart DDDD of this part (Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units).

(b) This subpart does not affect your CISWI or ACI if you make physical or operational changes to your incineration unit primarily to comply with subpart DDDD of this part (Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units). Such changes do not qualify as reconstruction or modification under this subpart.

§ 60.2020 What combustion units are exempt from this subpart?

This subpart exempts the types of units described in paragraphs (a) through (j) of this section, but some units are required to provide notifications.

(a) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in § 60.2265 are not subject to this subpart if you meet the two requirements specified in paragraphs (a)(1) and (2) of this section:

(1) Notify the Administrator that the unit meets these criteria; and

(2) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(b) *Municipal waste combustion units.* Incineration units that are subject to subpart Ea of this part (Standards of Performance for Municipal Waste Combustors); subpart Eb of this part (Standards of Performance for Large Municipal Waste Combustors); subpart Cb of this part (Emission Guidelines and Compliance Time for Large Municipal Combustors); subpart AAAA of this part (Standards of Performance for Small Municipal Waste Combustion Units); or subpart BBBB of this part (Emission Guidelines for Small Municipal Waste Combustion Units).

(c) *Medical waste incineration units.* Incineration units regulated under subpart Ec of this part (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) or subpart Ce of this part (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators).

(d) *Small power production facilities.* Units that meet the four requirements specified in paragraphs (d)(1) through (4) of this section:

(1) The unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C));

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity;

(3) You submit documentation to the Administrator notifying the EPA that the qualifying small power production facility is combusting homogenous waste; and

(4) You maintain the records specified in § 60.2175(w).

(e) *Cogeneration facilities.* Units that meet the four requirements specified in paragraphs (e)(1) through (4) of this section:

(1) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes;

(3) You submit documentation to the Administrator notifying the Agency that the qualifying cogeneration facility is combusting homogenous waste; and

(4) You maintain the records specified in § 60.2175(x).

(f) *Hazardous waste combustion units.* Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(g) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters.

(h) *Sewage treatment plants.* Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants).

(i) *Sewage sludge incineration units.* Incineration units combusting sewage sludge for the purpose of reducing the volume of the sewage sludge by removing combustible matter that are subject to subpart LLLL of this part (Standards of Performance for New Sewage Sludge Incineration Units) or subpart MMMM of this part (Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units).

(j) *Other solid waste incineration units.* Incineration units that are subject to subpart EEEE of this part (Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006) or subpart FFFF of this part (Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004).

§ 60.2030 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency (as well as EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to

a state, local, or tribal agency, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.

(c) The authorities that will not be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (9) of this section:

(1) Approval of alternatives to the emission limitations in tables 1, 5, 6, 7, and 8 of this subpart and operating limits established under § 60.2110;

(2) Approval of major alternatives to test methods;

(3) Approval of major alternatives to monitoring;

(4) Approval of major alternatives to recordkeeping and reporting;

(5) The requirements in § 60.2115;

(6) The requirements in § 60.2100(b)(2);

(7) Approval of alternative opacity emission limits in § 60.2105 under § 60.11(e)(6) through (8);

(8) Performance test and data reduction waivers under § 60.8(b)(4) and (5);

(9) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

§ 60.2035 How are these new source performance standards structured?

These new source performance standards contain the eleven major components listed in paragraphs (a) through (k) of this section:

(a) Preconstruction siting analysis;

(b) Waste management plan;

(c) Operator training and qualification;

(d) Emission limitations and operating limits;

(e) Performance testing;

(f) Initial compliance requirements;

(g) Continuous compliance requirements;

(h) Monitoring;

(i) Recordkeeping and reporting;

(j) Definitions; and

(k) Tables.

§ 60.2040 Do all eleven components of these new source performance standards apply at the same time?

No. You must meet the preconstruction siting analysis and waste management plan requirements before you commence construction of the CISWI. The operator training and qualification, emission limitations, operating limits, performance testing and compliance, monitoring, and most recordkeeping and reporting requirements are met after the CISWI begins operation.

Preconstruction Siting Analysis

§ 60.2045 Who must prepare a siting analysis?

(a) You must prepare a siting analysis if you plan to commence construction of an incinerator after December 1, 2000.

(b) You must prepare a siting analysis for CISWIs that commenced construction after June 4, 2010, or that commenced reconstruction or modification after August 7, 2013.

(c) You must prepare a siting analysis if you are required to submit an initial application for a construction permit under 40 CFR part 51, subpart I, or 40 CFR part 52, as applicable, for the reconstruction or modification of your CISWI.

§ 60.2050 What is a siting analysis?

(a) The siting analysis must consider air pollution control alternatives that minimize, on a site-specific basis, to the maximum extent practicable, potential risks to public health or the environment. In considering such alternatives, the analysis may consider costs, energy impacts, nonair environmental impacts, or any other factors related to the practicability of the alternatives.

(b) Analyses of your CISWI's impacts that are prepared to comply with state, local, or other federal regulatory requirements may be used to satisfy the requirements of this section, provided they include the consideration of air pollution control alternatives specified in paragraph (a) of this section.

(c) You must complete and submit the siting requirements of this section as required under § 60.2190(c) prior to commencing construction.

Waste Management Plan

§ 60.2055 What is a waste management plan?

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

§ 60.2060 When must I submit my waste management plan?

(a) You must submit a waste management plan prior to commencing construction.

(b) For CISWIs that commence reconstruction or modification after August 7, 2013, you must submit a waste management plan prior to the commencement of modification or reconstruction.

§ 60.2065 What should I include in my waste management plan?

A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures and implement those measures the source considers practical and feasible, considering the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have.

Operator Training and Qualification

§ 60.2070 What are the operator training and qualification requirements?

(a) No CISWI can be operated unless a fully trained and qualified CISWI operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI operator may operate the CISWI directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI operators are temporarily not accessible, you must follow the procedures in § 60.2100.

(b) Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in paragraph (c) of this section.

(c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section:

(1) Training on the eleven subjects listed in paragraphs (c)(1)(i) through (xi) of this section;

(i) Environmental concerns, including types of emissions;

(ii) Basic combustion principles, including products of combustion;

(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

(iv) Combustion controls and monitoring;

(v) Operation of air pollution control equipment and factors affecting performance (if applicable);

(vi) Inspection and maintenance of the incinerator and air pollution control devices;

(vii) Actions to prevent and correct malfunctions or to prevent conditions that may lead to malfunctions;

(viii) Bottom and fly ash characteristics and handling procedures;

(ix) Applicable federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards;

(x) Pollution prevention; and

(xi) Waste management practices.

(2) An examination designed and administered by the instructor.

(3) Written material covering the training course topics that may serve as reference material following completion of the course.

§ 60.2075 When must the operator training course be completed?

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of this section:

(a) Six months after your CISWI startup;

(b) December 3, 2001; and

(c) The date before an employee assumes responsibility for operating the CISWI or assumes responsibility for supervising the operation of the CISWI.

§ 60.2080 How do I obtain my operator qualification?

(a) You must obtain operator qualification by completing a training course that satisfies the criteria under § 60.2070(b).

(b) Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under § 60.2070(c)(2).

§ 60.2085 How do I maintain my operator qualification?

To maintain qualification, you must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs (a) through (e) of this section:

(a) Update of regulations;

(b) Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling;

(c) Inspection and maintenance;

(d) Prevention and correction of malfunctions or conditions that may lead to malfunction; and

(e) Discussion of operating problems encountered by attendees.

§ 60.2090 How do I renew my lapsed operator qualification?

You must renew a lapsed operator qualification by one of the two methods specified in paragraphs (a) and (b) of this section:

(a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in § 60.2085; and

(b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in § 60.2080(a).

§ 60.2095 What site-specific documentation is required?

(a) Documentation must be available at the facility and readily accessible for all CISWI operators that addresses the ten topics described in paragraphs (a)(1) through (10) of this section. You must maintain this information and the training records required by paragraph (c) of this section in a manner that they can be readily accessed and are suitable for inspection upon request:

(1) Summary of the applicable standards under this subpart;

(2) Procedures for receiving, handling, and charging waste;

(3) Incinerator startup, shutdown, and malfunction procedures;

(4) Procedures for maintaining proper combustion air supply levels;

(5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart;

(6) Monitoring procedures for demonstrating compliance with the incinerator operating limits;

(7) Reporting and recordkeeping procedures;

(8) The waste management plan required under §§ 60.2055 through 60.2065;

(9) Procedures for handling ash; and

(10) A list of the wastes burned during the performance test.

(b) You must establish a program for reviewing the information listed in paragraph (a) of this section with each incinerator operator:

(1) The initial review of the information listed in paragraph (a) of this section must be conducted within 6 months after the effective date of this subpart or prior to an employee's assumption of responsibilities for operation of the CISWI, whichever date is later; and

(2) Subsequent annual reviews of the information listed in paragraph (a) of this section must be conducted no later than 12 months following the previous review.

(c) You must also maintain the information specified in paragraphs (c)(1) through (3) of this section:

(1) Records showing the names of CISWI operators who have completed review of the information in § 60.2095(a) as required by § 60.2095(b), including the date of the initial review and all subsequent annual reviews;

(2) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2070, met the criteria for qualification under § 60.2080, and maintained or renewed their qualification under § 60.2085 or § 60.2090. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications; and

(3) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.

§ 60.2100 What if all the qualified operators are temporarily not accessible?

If all qualified operators are temporarily not accessible (*i.e.,* not at the facility and not able to be at the facility within 1 hour), you must meet one of the two criteria specified in paragraphs (a) and (b) of this section, depending on the length of time that a qualified operator is not accessible:

(a) When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI may be operated by other plant personnel familiar with the operation of the CISWI who have completed a review of the information specified in § 60.2095(a) within the past 12 months. However, you must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under § 60.2210; and

(b) When all qualified operators are not accessible for 2 weeks or more, you must take the two actions that are described in paragraphs (b)(1) and (2) of this section:

(1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible; and

(2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under paragraph (b)(1) of this section. If the Administrator notifies you that your request to continue operation of the CISWI is disapproved, the CISWI may continue operation for 90 days, then must cease operation. Operation of the unit may resume if you meet the two requirements in paragraphs (b)(2)(i) and (ii) of this section:

(i) A qualified operator is accessible as required under § 60.2070(a); and

(ii) You notify the Administrator that a qualified operator is accessible and that you are resuming operation.

Emission Limitations and Operating Limits

§ 60.2105 What emission limitations must I meet and by when?

(a) You must meet the emission limitations for each CISWI, including bypass stack or vent, specified in table 1 of this subpart or tables 5 through 8 of this subpart by the applicable date in § 60.2140. You must be in compliance with the emission limitations of this subpart that apply to you at all times.

(b) A CISWI or ACI that commenced construction after November 30, 1999, but no later than June 4, 2010, or that commenced reconstruction or modification on or after June 1, 2001 but no later than August 7, 2013, must continue to meet the emission limits in table 1 of this subpart for units in the incinerator subcategory and § 60.2250 for ACIs until the units become subject to the requirements of an approved state plan or federal plan that implements subpart DDDD of this part (Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units).

§ 60.2110 What operating limits must I meet and by when?

(a) If you use a wet scrubber(s) to comply with the emission limitations, you must establish operating limits for up to four operating parameters (as specified in table 2 of this subpart) as described in paragraphs (a)(1) through (4) of this section during the initial performance test:

(1) Maximum charge rate, calculated using one of the two different procedures in paragraph (a)(1)(i) or (ii) of this section, as appropriate:

(i) For continuous and intermittent units, maximum charge rate is 110 percent of the average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations; and

(ii) For batch units, maximum charge rate is 110 percent of the daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(2) Minimum pressure drop across the wet particulate matter scrubber, which is calculated as the lowest 1-hour average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or minimum amperage to the wet scrubber, which is calculated as the lowest 1-hour average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations;

(3) Minimum scrubber liquid flow rate, which is calculated as the lowest 1-hour average liquid flow rate at the inlet to the wet acid gas or particulate matter scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations; and

(4) Minimum scrubber liquor pH, which is calculated as the lowest 1-hour average liquor pH at the inlet to the wet acid gas scrubber measured during the most recent performance test demonstrating compliance with the hydrogen chloride (HCl) emission limitation.

(b) You must meet the operating limits established during the initial performance test 60 days after your CISWI reaches the charge rate at which it will operate, but no later than 180 days after its initial startup.

(c) If you use a fabric filter to comply with the emission limitations and you do not use a particulate matter (PM) continuous parameter monitoring system (CPMS) for monitoring PM compliance, you must operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.

(d) If you use an electrostatic precipitator to comply with the emission limitations and you do not use a PM CPMS for monitoring PM compliance, you must measure the (secondary) voltage and amperage of the electrostatic precipitator collection plates during the particulate matter performance test. Calculate the average electric power value (secondary voltage × secondary current = secondary electric power) for each test run. The operating limit for the electrostatic precipitator is calculated as the lowest 1-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(e) If you use activated carbon sorbent injection to comply with the emission limitations, you must measure the sorbent flow rate during the performance testing. The operating limit for the carbon sorbent injection is calculated as the lowest 1-hour average sorbent flow rate measured during the most recent performance test demonstrating compliance with the mercury emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (*e.g.,* for 50 percent load, multiply the injection rate operating limit by 0.5).

(f) If you use selective noncatalytic reduction to comply with the emission limitations, you must measure the charge rate, the secondary chamber temperature (if applicable to your CISWI), and the reagent flow rate during the nitrogen oxides performance testing. The operating limits for the selective noncatalytic reduction are calculated as the highest 1-hour average charge rate, lower secondary chamber temperature, and lowest reagent flow rate measured during the most recent performance test demonstrating compliance with the nitrogen oxides emission limitations.

(g) If you use a dry scrubber to comply with the emission limitations, you must measure the injection rate of each sorbent during the performance testing. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate for each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (*e.g.,* for 50 percent load, multiply the injection rate operating limit by 0.5).

(h) If you do not use a wet scrubber, electrostatic precipitator, or fabric filter to comply with the emission limitations, and if you do not determine compliance with your particulate matter emission limitation with either a particulate matter CEMS or a particulate matter CPMS, you must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).

(i) If you use a PM CPMS to demonstrate compliance, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of this section:

(1) Determine your operating limit as the average PM CPMS output value recorded during the performance test or at a PM CPMS output value corresponding to 75 percent of the emission limit if your PM performance test demonstrates compliance below 75 percent of the emission limit. You must

verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test:

(i) Your PM CPMS must provide a 4–20 milliamp output, or digital equivalent, and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps;

(ii) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit; and

(iii) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values, or their digital equivalent, from the PM CPMS for the periods corresponding to the compliance test runs (*e.g.,* average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(2) If the average of your three PM performance test runs are below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS output values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in (i)(1) through (5) of this section:

(i) Determine your instrument zero output with one of the following procedures:

(A) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench;

(B) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air;

(C) The zero point can also can be established obtained by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (*e.g.,* when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept; and

(D) If none of the steps in paragraphs (i)(2)(i)(A) through (C) of this section are possible, you must use a zero output value provided by the manufacturer.

(ii) Determine your PM CPMS instrument average in milliamps, or the digital equivalent, and the average of your corresponding three PM compliance test runs, using equation 1:

$$\overline{x} = \frac{1}{n}\sum_{i=1}^{n} X_1, \overline{y} = \frac{1}{n}\sum_{i=1}^{n} Y_1 \qquad \text{(Eq. 1)}$$

Where:

X_1 = the PM CPMS output data points for the three runs constituting the performance test,

Y_1 = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

(iii) With your instrument zero expressed in milliamps, or the digital equivalent, your three run average PM CPMS milliamp value, or its digital equivalent, and your three run average PM concentration from your three compliance tests, determine a relationship of mg/dscm per milliamp or digital signal equivalent with equation 2:

$$R = \left(\frac{Y_1}{X_{1-z}}\right) \qquad \text{(Eq. 2)}$$

Where:

R = the relative mg/dscm per milliamp or digital equivalent for your PM CPMS,

Y_1 = the three run average mg/dscm PM concentration,

X_1 = the three run average milliamp or digital signal output from you PM CPMS, and

z = the milliamp or digital signal equivalent of your instrument zero determined from paragraph (2)(i) of this section.

(iv) Determine your source specific 30-day rolling average operating limit using the mg/dscm per milliamp or digital value from equation 2 in equation 3, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit:

$$O_l = z + \frac{0.75(L)}{R} \qquad \text{(Eq. 3)}$$

Where:

O_l = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps or their digital signal equivalent,

L = your source emission limit expressed in mg/dscm,

z = your instrument zero in milliamps or the digital equivalent, determined from paragraph (2)(i) of this secction, and

R = the relative mg/dscm per milliamp or digital signal output equivalent for your PM CPMS, from equation 2.

(3) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp or digital signal output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 4 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of this section:

$$O_n = \frac{1}{n}\sum_{i=1}^{n} X_1 \qquad \text{(Eq. 4)}$$

Where:

X_1 = the PM CPMS data points for all runs i,

n = the number of data points, and

O_h = your site specific operating limit, in milliamps or digital signal equivalent.

(4) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (*e.g.,* milliamps or digital signal bits, PM concentration, raw data signal) on a 30-day rolling average basis.

(5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.,* beta attenuation), span of the instruments primary analytical range, milliamp or digital signal value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital signals corresponding to each PM compliance test run.

§ 60.2115 What if I do not use a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations?

If you use an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber or limit emissions in some other manner, including material balances, to comply with the emission limitations under § 60.2105, you must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must submit the petition at least sixty days before the performance test is scheduled to begin. Your petition must include the five items listed in paragraphs (a) through (e) of this section:

(a) Identification of the specific parameters you propose to use as additional operating limits;

(b) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters and how limits on these parameters will serve to limit emissions of regulated pollutants;

(c) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters;

(d) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(e) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

Performance Testing

§ 60.2125 How do I conduct the initial and annual performance test?

(a) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.

(b) You must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in § 60.2175(b)(1)) and the types of waste burned during the performance test.

(c) All performance tests must be conducted using the minimum run duration specified in table 1 of this subpart or tables 5 through 8 of this subpart.

(d) Method 1 of appendix A of this part must be used to select the sampling location and number of traverse points.

(e) Method 3A or 3B of appendix A of this part must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B of appendix A of this part must be used simultaneously with each method (except when using Method 9 and Method 22).

(f) All pollutant concentrations, except for opacity, must be adjusted to 7 percent oxygen using equation 5 of this section:

$$C_{adj} = C_{meas}\,(20.9\text{-}7)/(20.9\text{-}\%O_2) \qquad \text{(Eq. 5)}$$

Where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

C_{meas} = pollutant concentration measured on a dry basis;

(20.9–7) = 20.9 percent oxygen − 7 percent oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(g) You must determine dioxins/furans toxic equivalency by following the procedures in paragraphs (g)(1) through (4) of this section:

(1) Measure the concentration of each dioxin/furan tetra-through octa-chlorinated isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A–7;

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.);

(3) For each dioxin/furan (tetra-through octa-chlorinated) isomer measured in accordance with paragraphs (g)(1) and (2) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in table 3 of this subpart; and

(4) Sum the products calculated in accordance with paragraph (g)(3) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

(h) Method 22 at 40 CFR part 60, appendix A–7 of this part must be used to determine compliance with the fugitive ash emission limit in table 1 of this subpart or tables 5 through 8 of this subpart.

(i) If you have an applicable opacity operating limit, you must determine compliance with the opacity limit using Method 9 at 40 CFR part 60, appendix A–4, based on three 1-hour blocks consisting of ten 6-minute average opacity values, unless you are required to install a continuous opacity monitoring system, consistent with §§ 60.2145 and 60.2165.

(j) You must determine dioxins/furans total mass basis by following the procedures in paragraphs (j)(1) through (3) of this section:

(1) Measure the concentration of each dioxin/furan tetra-through octa-chlorinated isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A–7;

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.); and

(3) Sum the quantities measured in accordance with paragraphs (j)(1) and (2) of this section to obtain the total concentration of dioxins/furans emitted in terms of total mass basis.

§ 60.2130 How are the performance test data used?

You use results of performance tests to demonstrate compliance with the emission limitations in table 1 of this subpart or tables 5 through 8 of this subpart.

Initial Compliance Requirements

§ 60.2135 How do I demonstrate initial compliance with the emission limitations and establish the operating limits?

(a) You must conduct a performance test, as required under §§ 60.2125 and 60.2105to determine compliance with the emission limitations in table 1 of this subpart or tables 5 through 8 of this subpart, to establish compliance with any opacity operating limit in § 60.2110, to establish the kiln-specific emission limit in § 60.2145(y), as applicable, and to establish operating limits using the procedures in § 60.2110 or § 60.2115. The performance test must be conducted using the test methods listed in table 1 of this subpart or tables 5 through 8 of this subpart and the procedures in § 60.2125. The use of the bypass stack during a performance test shall invalidate the performance test.

(b) As an alternative to conducting a performance test, as required under §§ 60.2125 and 60.2105, you may use a 30-day rolling average of the 1-hour arithmetic average CEMS data, including CEMS data during startup and shutdown as defined in this subpart, to determine compliance with the emission limitations in Table 1 of this subpart or tables 5 through 8 of this subpart. You must conduct a performance evaluation of each continuous monitoring system within 180 days of installation of the monitoring system. The initial performance evaluation must be conducted prior to collecting CEMS data that will be used for the initial compliance demonstration.

§ 60.2140 By what date must I conduct the initial performance test?

(a) The initial performance test must be conducted within 60 days after your CISWI reaches the charge rate at which it will operate, but no later than 180 days after its initial startup.

(b) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility, and you conducted a test consistent with the provisions of this subpart while combusting the solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you do not need to retest until 6 months from the date you reintroduce that solid waste.

(c) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you have not conducted a performance test consistent with the provisions of this subpart while combusting the solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you must conduct a performance test within 60 days from the date you reintroduce that solid waste.

§ 60.2141 By what date must I conduct the initial air pollution control device inspection?

(a) The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI reaches the charge rate at which it will operate, but no later than 180 days after the device's initial startup.

(b) Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed.

Continuous Compliance Requirements

§ 60.2145 How do I demonstrate continuous compliance with the emission limitations and the operating limits?

(a) General compliance with standards, considering some units may be able to switch between solid waste and non-waste fuel combustion, is specified in paragraph (a)(1) through (6) of this section.

(1) The emission standards and operating requirements set forth in this subpart apply at all times;

(2) If you cease combusting solid waste, you may opt to remain subject to the provisions of this subpart. Consistent with the definition of CISWI, you are subject to the requirements of this subpart at least 6 months following the last date of solid waste combustion. Solid waste combustion is ceased when solid waste is not in the combustion chamber (*i.e.,* the solid waste feed to the combustor has been cut off for a period of time not less than the solid waste residence time);

(3) If you cease combusting solid waste, you must be in compliance with

any newly applicable standards on the effective date of the waste-to-fuel switch. The effective date of the waste-to-fuel switch is a date selected by you, that must be at least 6 months from the date that you ceased combusting solid waste, consistent with § 60.2145(a)(2). Your source must remain in compliance with this subpart until the effective date of the waste-to-fuel switch;

(4) If you own or operate an existing commercial or industrial combustion unit that combusted a fuel or non-waste material, and you commence or recommence combustion of solid waste, you are subject to the provisions of this subpart as of the first day you introduce or reintroduce solid waste to the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch. You must complete all initial compliance demonstrations for any section 112 standards that are applicable to your facility before you commence or recommence combustion of solid waste. You must provide 30 days prior notice of the effective date of the waste-to-fuel switch. The notification must identify:

(i) The name of the owner or operator of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;

(ii) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(iii) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(iv) The date on which you became subject to the currently applicable emission limits; and

(v) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (*i.e.,* the effective date of the waste-to-fuel switch), consistent with paragraphs (a)(2) and (3) of this section.

(5) All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch.

(6) All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy tests must be performed as of the performance test deadline for PM CEMS (if PM CEMS are elected to demonstrate continuous compliance with the particulate matter emission limits). Relative accuracy testing for other CEMS need not be repeated if that testing was previously performed consistent with Clean Air Act section 112 monitoring requirements or monitoring requirements under this subpart.

(b) You must conduct an annual performance test for the pollutants listed in table 1 of this subpart or tables 5 through 8 of this subpart and opacity for each CISWI as required under § 60.2125. The annual performance test must be conducted using the test methods listed in table 1 of this subpart or tables 5 through 8 of this subpart and the procedures in § 60.2125. Annual performance tests are not required if you use CEMS or continuous opacity monitoring systems to determine compliance.

(c) You must continuously monitor the operating parameters specified in § 60.2110 or established under § 60.2115 and as specified in § 60.2170. Use 3-hour block average values to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under § 60.2115 or, for energy recovery units, where the averaging time for each operating parameter is a 30-day rolling, calculated each hour as the average of the previous 720 operating hours. Operation above the established maximum, below the established minimum, or outside the allowable range of operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

(d) You must burn only the same types of waste and fuels used to establish subcategory applicability (for energy recovery units) and operating limits during the performance test.

(e) For energy recovery units, incinerators, and small remote units, you must perform an annual visual emissions test for ash handling.

(f) For energy recovery units, you must conduct an annual performance test for opacity (except where particulate matter CEMS or continuous opacity monitoring systems are used are used) and the pollutants listed in table 6 of this subpart.

(g) You may elect to demonstrate initial and continuous compliance with the carbon monoxide emission limit using a carbon monoxide CEMS, as described in § 60.2165(o).

(h) Coal and liquid/gas energy recovery units with average annual heat input rates greater than or equal to 250 million British thermal units/hour (MMBtu/hr) may elect to demonstrate initial and continuous compliance with the particulate matter emissions limit using a particulate matter CEMS according to the procedures in § 60.2165(n) instead of the PM CPMS specified in § 60.2145. Coal and liquid/gas energy recovery units with annual average heat input rates less than 250 MMBtu/hr, incinerators, and small remote incinerators may also elect to demonstrate initial and continuous compliance using a particulate matter CEMS according to the procedures in § 60.2165(n) instead of particulate matter testing with EPA Method 5 at 40 CFR part 60, appendix A–3 and, if applicable, the continuous opacity monitoring requirements in paragraph (i) of this section.

(i) For energy recovery units with annual average heat input rates greater than or equal to 10 MMBtu/hr and less than 250 MMBtu/hr that do not use a wet scrubber, fabric filter with bag leak detection system, an electrostatic precipitator, particulate matter CEMS, or particulate matter CPMS, you must install, operate, certify and maintain a continuous opacity monitoring system (COMS) according to the procedures in § 60.2165(m).

(j) For waste-burning kilns, you must conduct an annual performance test for cadmium, lead, carbon monoxide, dioxins/furans and hydrogen chloride as listed in Table 7 of this subpart, unless you choose to demonstrate initial and continuous compliance using CEMS, as allowed in paragraph (u) of this section. If you do not use an acid gas wet scrubber or dry scrubber, you must determine compliance with the hydrogen chloride emissions limit using a HCl CEMS according to the requirements in paragraph (j)(1) of this section. You must determine compliance with the mercury emissions limit using a mercury CEMS or an integrated sorbent trap monitoring system according to paragraph (j)(2) of this section. You must determine compliance with nitrogen oxides and

sulfur dioxide using CEMS. You must determine compliance with particulate matter using CPMS.

(1) If you monitor compliance with the HCl emissions limit by operating an HCl CEMS, you must do so in accordance with Performance Specification 15 (PS 15) of appendix B to 40 CFR part 60 or PS 18 of appendix B to 40 CFR part 60. You must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR part 60 except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. You must operate, maintain and quality assure a HCl CEMS installed and certified under PS 18 according to the quality assurance requirements in Procedure 6 of appendix F to 40 CFR part 60. For any performance specification that you use, you must use Method 321 of appendix A to 40 CFR part 63 as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (j)(1)(i) and (ii) of this section apply to all HCl CEMS used under this subpart:

(i) You must use a measurement span value for any HCl CEMS of 0–10 ppmvw unless the monitor is installed on a kiln without an inline raw mill. Kilns without an inline raw mill may use a higher span value sufficient to quantify all expected emissions concentrations. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during ''mill off'' conditions. The corresponding data recorder range shall be documented in the site-specific monitoring plan and associated records;

(ii) In order to quality assure data measured above the span value, you must use one of the three options in paragraphs (j)(1)(ii)(A) through (C) of this section:

(A) Include a second span that encompasses the HCl emission concentrations expected to be encountered during ''mill off'' conditions. This second span may be rounded to a multiple of 5 ppm of total HCl. The requirements of the appropriate HCl monitor performance specification shall be followed for this second span with the exception that a RATA with the mill off is not required;

(B) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (j)(1)(i) of this section using the following procedure. Conduct a weekly ''above span linearity'' calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75% of the highest measured hourly concentration. The ''above span'' reference gas must meet the requirements of the applicable performance specification and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The ''above span linearity'' challenge is successful if the value measured by the HCl CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the HCl CEMS during the above span linearity challenge exceeds 10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new ''above span linearity'' challenge met before returning the HCl CEMS to service, or data above span from the HCl CEMS must be subject to the quality assurance procedures established in (j)(1)(ii)(D) of this section. In this manner values measured by the HCl CEMS during the above span linearity challenge exceeding +/− 20 percent of the certified value of the reference gas must be normalized using equation 6;

(C) Quality assure any data above the span value established in paragraph (j)(1)(i) of this section using the following procedure. Any time two consecutive one-hour average measured concentration of HCl exceeds the span value you must, within 24 hours before or after, introduce a higher, ''above span'' HCl reference gas standard to the HCl CEMS. The ''above span'' reference gas must meet the requirements of the applicable performance specification and target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include above span calibrations done before or after the above-span measurement period. Record and report the results of this procedure as you would for a daily calibration. The ''above span'' calibration is successful if the value measured by the HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then you must normalize the stack gas values measured above span as described in paragraph (j)(1)(ii)(D) of this section. If the ''above span'' calibration is conducted during the period when measured emissions are above span and there is a failure to collect the one data point in an hour due to the calibration duration, then you must determine the emissions average for that missed hour as the average of hourly averages for the hour preceding the missed hour and the hour following the missed hour. In an hour where an ''above span'' calibration is being conducted and one or more data points are collected, the emissions average is represented by the average of all valid data points collected in that hour;

(D) In the event that the ''above span'' calibration is not successful (*i.e.,* the HCl CEMS measured value is not within 20 percent of the certified value of the reference gas), then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the ''above span'' calibration for reporting based on the HCl CEMS response to the reference gas as shown in equation 6:

$$\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gas}\ x\ Measured\ stack\ gas\ result = Normalized\ stack\ gas\ result \qquad \text{(Eq. 6)}$$

Only one ''above span'' calibration is needed per 24-hour period.

(2) Compliance with the mercury emissions limit must be determined using a mercury CEMS or integrated sorbent trap monitoring system according to the following requirements:

(i) You must operate a mercury CEMS system in accordance with performance specification 12A of 40 CFR part 60, appendix B or an integrated sorbent trap monitoring system in accordance with performance specification 12B of 40 CFR part 60, appendix B; these monitoring systems must be quality assured according to procedure 5 of 40

CFR 60, appendix F. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. If you choose to comply with the production-rate based mercury limit for your waste-burning kiln, you must also monitor hourly clinker production and determine the hourly mercury emissions rate in pounds per million ton of clinker produced. You must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations or mass emissions rates, including CEMS and integrated sorbent trap monitoring system data during startup and shutdown as defined in this subpart, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7 of this part. Integrated sorbent trap monitoring system and CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content;

(ii) Owners or operators using a mercury CEMS or integrated sorbent trap monitoring system to determine mass emission rate must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specification 6 of 40 CFR part 60, appendix B, and conducting an annual relative accuracy test of the continuous emission rate monitoring system according to section 8.2 of performance specification 6; and

(iii) The owner or operator of a waste-burning kiln must demonstrate initial compliance by operating a mercury CEMS or integrated sorbent trap monitoring system while the raw mill of the in-line kiln/raw mill is operating under normal conditions and including at least one period when the raw mill is off.

(k) If you use an air pollution control device to meet the emission limitations in this subpart, you must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:

(1) Inspect air pollution control device(s) for proper operation; and

(2) Develop a site-specific monitoring plan according to the requirements in paragraph (l) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 60.13(i).

(l) For each continuous monitoring system required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of this paragraph (l) that addresses paragraphs (l)(1)(i) through (vi) of this section:

(1) You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your continuous monitoring system:

(i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems.

(iii) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of § 60.11(d);

(v) Ongoing data quality assurance procedures in accordance with the general requirements of § 60.13; and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 60.7(b), (c) introductory text, (c)(1) and (4), and (d) through (g).

(2) You must conduct a performance evaluation of each continuous monitoring system in accordance with your site-specific monitoring plan.

(3) You must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.

(m) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (l) and (m)(1) through (4) of this section:

(1) Install the flow sensor and other necessary equipment in a position that provides a representative flow;

(2) Use a flow sensor with a measurement sensitivity at full scale of no greater than 2 percent;

(3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; and

(4) Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(n) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (l) and (n)(1) through (6) of this section:

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.,* PM scrubber pressure drop);

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion;

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less;

(4) Perform checks at the frequency outlined in your site-specific monitoring plan to ensure pressure measurements are not obstructed (*e.g.,* check for pressure tap plugging daily);

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually; and

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(o) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (l) and (o)(1) through (4) of this section:

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH;

(2) Ensure the sample is properly mixed and representative of the fluid to be measured;

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day; and

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(p) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic

precipitator, you must meet the requirements in paragraphs (l) and (p)(1) and (2) of this section:

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates; and

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(q) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (*e.g.,* weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (l) and (q)(1) and (2) of this section:

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate; and

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(r) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (l) and (r)(1) through (5) of this section:

(1) Install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.,* for a positive pressure fabric filter) of the fabric filter;

(2) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less;

(3) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA–454/R–98–015 (incorporated by reference, *see* § 60.17);

(4) Use a bag leak detection system equipped with a device to continuously record the output signal from the sensor; and

(5) Use a bag leak detection system equipped with a system that will sound an alarm when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is observed readily by plant operating personnel.

(s) For facilities using a CEMS to demonstrate initial and continuous compliance with the sulfur dioxide emission limit, compliance with the sulfur dioxide emission limit may be demonstrated by using the CEMS specified in § 60.2165(l) to measure sulfur dioxide. The sulfur dioxide CEMS must follow the procedures and methods specified in paragraph (s) of this section. For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide CEMS should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the CEMS, whichever is greater:

(1) During each relative accuracy test run of the CEMS required by performance specification 2 in appendix B of this part, collect sulfur dioxide and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (s)(1)(i) and (ii) of this section:

(i) For sulfur dioxide, EPA Reference Method 6 or 6C, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, *see* § 60.17) must be used; and

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, *see* § 60.17), must be used.

(2) The span value of the CEMS at the inlet to the sulfur dioxide control device must be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this subpart. The span value of the CEMS at the outlet of the sulfur dioxide control device must be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this subpart.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(t) For facilities using a CEMS to demonstrate initial and continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in § 60.2165 to measure nitrogen oxides. The nitrogen oxides CEMS must follow the procedures and methods specified in paragraphs (t)(1) through (4) of this section:

(1) During each relative accuracy test run of the CEMS required by performance specification 2 of appendix B of this part, collect nitrogen oxides and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (t)(1)(i) and (ii) of this section:

(i) For nitrogen oxides, EPA Reference Method 7 or 7E at 40 CFR part 60, appendix A–4 must be used; and

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B at 40 CFR part 60, appendix A–3, or as an alternative ANSI/ASME PTC 19–10.1981 (incorporated by reference, *see* § 60.17), as applicable, must be used.

(2) The span value of the continuous emission monitoring system must be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the unit.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(4) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified in paragraphs (t)(4)(i) through (iv) of this section. This relationship may be re-established during performance compliance tests:

(i) The fuel factor equation in Method 3B must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, *see* § 60.17), as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor;

(ii) Samples must be taken for at least 30 minutes in each hour;

(iii) Each sample must represent a 1-hour average; and

(iv) A minimum of three runs must be performed.

(u) For facilities using a CEMS or an integrated sorbent trap monitoring system for mercury to demonstrate initial and continuouscompliance with any of the emission limits of this subpart, you must complete the following:

(1) Demonstrate compliance with the appropriate emission limit(s) using a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS or integrated sorbent trap monitoring systems data during startup and shutdown as defined in this

subpart, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at appendix A–7 of this part. The 1-hour arithmetic averages for CEMS must be calculated using the data points required under § 60.13(e)(2). Except for CEMS or integrated sorbent trap monitoring systems data during startup and shutdown, the 1-hour arithmetic averages used to calculate the 30-day rolling average emission concentrations must be corrected to 7 percent oxygen (dry basis). Integrated sorbent trap monitoring systems or CEMS data during startup and shutdown, as defined in the subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content; and

(2) Operate all CEMS and integrated sorbent trap monitoring systems in accordance with the applicable procedures under appendices B and F of this part.

(v) Use of the bypass stack at any time is an emissions standards deviation for PM, HCl, lead, cadmium, mercury, nitrogen oxides, sulfur dioxide, and dioxin/furans.

(w) For energy recovery units with a design heat input capacity of 100 MMBtu/hr or greater that do not use a carbon monoxide CEMS, you must install, operate, and maintain a oxygen analyzer system as defined in § 60.2265 according to the procedures in paragraphs (w)(1) through (4) of this section:

(1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2140;

(2) You must operate the oxygen trim system within compliance with paragraph (w)(3) of this section at all times;

(3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test; and

(4) You must calculate and record a 30-day rolling average oxygen concentration using equation 19–19 in section 12.4.1 of EPA Reference Method 19 of Appendix A–7 of this part.

(x) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hr and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (x)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure):

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with paragraphs (l) and (x)(1)(i) through (iii) of this section:

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps or the digital signal equivalent;

(ii) The PM CPMS must have a cycle time (*i.e.,* period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes; and

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations increments no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2110.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps or their digital equivalent).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (x)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value;

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit. Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under paragraph (x) of this section; and

(iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

(y) When there is an alkali bypass and/or an in-line coal mill that exhaust emissions through a separate stack(s),

the combined emissions are subject to the emission limits applicable to waste-burning kilns. To determine the kiln-specific emission limit for demonstrating compliance, you must:

(1) Calculate a kiln-specific emission limit using equation 7:

$$C_{ks} = ((\text{Emission limit} \times (Q_{ab}+Q_{cm}+Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm}))/Q_{ks} \quad \text{(Eq. 7)}$$

Where:

C_{ks} = Kiln stack concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{ab} = Alkali bypass flow rate (volume/hr)
C_{ab} = Alkali bypass concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{cm} = In-line coal mill flow rate (volume/hr)
C_{cm} = In-line coal mill concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{ks} = Kiln stack flow rate (volume/hr)

(2) Particulate matter concentration must be measured downstream of the in-line coal mill. All other pollutant concentrations must be measured either upstream or downstream of the in-line coal mill; and

(3) For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS or PM CPMS on the alkali bypass stack or in-line coal mill stack, the results of the initial and subsequent performance test can be used to demonstrate compliance with the relevant emissions limit. A performance test must be conducted on an annual basis (between 11 and 13 calendar months following the previous performance test).

§ 60.2150 By what date must I conduct the annual performance test?

You must conduct annual performance tests between 11 and 13 months of the previous performance test.

§ 60.2151 By what date must I conduct the annual air pollution control device inspection?

On an annual basis (no more than 12 months following the previous annual air pollution control device inspection), you must complete the air pollution control device inspection as described in § 60.2141.

§ 60.2155 May I conduct performance testing less often?

(a) You must conduct annual performance tests according to the schedule specified in § 60.2150, with the following exceptions:

(1) You may conduct a repeat performance test at any time to establish new values for the operating limits, as specified in § 60.2160. New operating limits become effective on the date that the performance test report is submitted to the EPA's Central Data Exchange or postmarked, per the requirements of § 60.2235(b). The Administrator may request a repeat performance test at any time;

(2) You must repeat the performance test within 60 days of a process change, as defined in § 60.2265;

(3) You can conduct performance tests less often if you meet the following conditions: your performance tests for the pollutant for at least 2 consecutive performance tests demonstrates that the emission level for the pollutant is no greater than the emission level specified in paragraph (a)(3)(i) or (ii) of this section, as applicable; there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions; and you are not required to conduct a performance test for the pollutant in response to a request by the Administrator in paragraph (a)(1) of this section or a process change in paragraph (a)(2) of this section. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test for the pollutant no more than 37 months following the previous performance test for the pollutant. If the emission level for your CISWI continues to meet the emission level specified in paragraph (a)(3)(i) or (ii) of this section, as applicable, you may choose to conduct performance tests for the pollutant every third year, as long as there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. Each such performance test must be conducted no more than 37 months after the previous performance test.

(i) For particulate matter, hydrogen chloride, mercury, nitrogen oxides, sulfur dioxide, cadmium, lead and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit in table 1 or tables 5 through 8 of this subpart, as applicable; and

(ii) For fugitive emissions, visible emissions (of combustion ash from the ash conveying system) for 2 percent of the time during each of the three 1-hour observations periods.

(4) If you are conducting less frequent testing for a pollutant as provided in paragraph (a)(3) of this section and a subsequent performance test for the pollutant indicates that your CISWI does not meet the emission level specified in paragraph (a)(3)(i) or (ii) of this section, as applicable, you must conduct annual performance tests for the pollutant according to the schedule specified in paragraph (a) of this section until you qualify for less frequent testing for the pollutant as specified in paragraph (a)(3) of this section.

(b) [Reserved]

§ 60.2160 May I conduct a repeat performance test to establish new operating limits?

(a) Yes. You may conduct a repeat performance test at any time to establish new values for the operating limits. The Administrator may request a repeat performance test at any time.

(b) You must repeat the performance test if your feed stream is different than the feed streams used during any performance test used to demonstrate compliance.

Monitoring

§ 60.2165 What monitoring equipment must I install and what parameters must I monitor?

(a) If you are using a wet scrubber to comply with the emission limitation under § 60.2105, you must install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the value of the operating parameters used to determine compliance with the operating limits listed in table 2 of this subpart. These devices (or methods) must measure and record the values for these operating parameters at the frequencies indicated in table 2 of this subpart at all times except as specified in § 60.2170(a).

(b) If you use a fabric filter to comply with the requirements of this subpart and you do not use a PM CPMS or PM CEMS for monitoring PM compliance, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (b)(1) through (8) of this section:

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations;

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less;

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

(6) The bag leak detection system must be equipped with an alarm system that will alert automatically an operator when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is observed easily by plant operating personnel;

(7) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter; and

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(c) If you are using something other than a wet scrubber, activated carbon, selective non-catalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations under § 60.2105, you must install, calibrate (to the manufacturers' specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established using the procedures in § 60.2115.

(d) If you use activated carbon injection to comply with the emission limitations in this subpart, you must measure the minimum mercury sorbent flow rate once per hour.

(e) If you use selective noncatalytic reduction to comply with the emission limitations, you must complete the following:

(1) Following the date on which the initial performance test is completed or is required to be completed under § 60.2125, whichever date comes first, ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature (if applicable to your CISWI) or the minimum reagent flow rate measured as 3-hour block averages at all times; and

(2) Operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum reagent flow rate simultaneously constitute a violation of the nitrogen oxides emissions limit.

(f) If you use an electrostatic precipitator to comply with the emission limits of this subpart and you do not use a PM CPMS for monitoring PM compliance, you must monitor the secondary power to the electrostatic precipitator collection plates and maintain the 3-hour block averages at or above the operating limits established during the mercury or particulate matter performance test.

(g) For waste-burning kilns not equipped with a wet scrubber or dry scrubber, you must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions discharged to the atmosphere, as specified in § 60.2145(j), and record the output of the system. You may substitute use of a HCl CEMS for conducting the HCl initial and annual testing with EPA Method 321 at 40 CFR part 63, appendix A. For units other than waste-burning kilns not equipped with a wet scrubber or dry scrubber, a facility may substitute use of a hydrogen chloride CEMS for conducting the hydrogen chloride initial and annual performance test. For units equipped with a hydrogen chloride CEMS, you are not required to monitor the minimum hydrogen chloride sorbent flow rate, the minimum scrubber liquor pH, or the monitoring minimum injection rate.

(h) To demonstrate compliance with the particulate matter emissions limit, a facility may substitute use of a particulate matter CEMS for conducting the PM initial and annual performance test. For units equipped with a particulate matter CEMS, you are not required to use other CMS for monitoring PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure).

(i) To demonstrate initial and continuous compliance with the dioxin/furan emissions limit, a facility may substitute use of a continuous automated sampling system for the dioxin/furan initial and annual performance tests. You must record the output of the system and analyze the sample according to EPA Method 23 at 40 CFR part 60, Appendix A–7 of this part. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to dioxin/furan from continuous monitors is published in the **Federal Register**. The owner or operator who elects to continuously sample dioxin/furan emissions instead of sampling and testing using EPA Method 23 at 40 CFR part 60, appendix A–7 must install, calibrate, maintain, and operate a continuous automated sampling system and must comply with the requirements specified in § 60.58b(p) and (q). A facility may substitute continuous dioxin/furan monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the dioxin/furan emission limit.

(j) To demonstrate initial and continuous compliance with the mercury emissions limit, a facility may substitute use of a mercury CEMS or an integrated sorbent trap monitoring system for the mercury initial and annual performance test. The owner or operator who elects to continuously measure mercury emissions instead of sampling and testing using EPA Reference Method 29 or 30B at 40 CFR part 60, appendix A–8, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 60.17), or an approved alternative method for measuring mercury emissions, must install, calibrate, maintain, and operate the mercury CEMS or integrated sorbent trap monitoring system and must comply with performance specification 12A or performance specification 12B, respectively, and quality assurance procedure 5. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. Waste-burning kilns must install, calibrate, maintain, and operate a mercury CEMS or an integrated sorbent trap monitoring system as specified in § 60.2145(j). For units equipped with a mercury CEMS or an integrated sorbent trap monitoring system, you are not required to monitor the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the mercury emission limit.

(k) To demonstrate initial and continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a CEMS for the nitrogen oxides initial and annual performance test to demonstrate compliance with the nitrogen oxides emissions limits. For units equipped with a nitrogen oxides CEMS, you are not required to monitor the charge rate, secondary chamber temperature, and reagent flow for selective noncatalytic reduction, if applicable:

(1) Install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation, and operation of the CEMS; and

(2) Compliance with the emission limit for nitrogen oxides must be determined based on the 30-day rolling average of the hourly emission concentrations using CEMS outlet data, as outlined in § 60.2145(u).

(l) To demonstrate initial and continuous compliance with the sulfur dioxide emissions limit, a facility may substitute use of a CEMS for the sulfur dioxide initial and annual performance test to demonstrate compliance with the sulfur dioxide emissions limits:

(1) Install, calibrate, maintain, and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance requirements of procedure one of appendix F of this part and procedures under § 60.13 must be followed for installation, evaluation, and operation of the CEMS; and

(2) Compliance with the sulfur dioxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations using CEMS outlet data, as outlined in § 60.2145(u).

(m) For energy recovery units over 10 MMBtu/hr but less than 250 MMBtu/hr annual average heat input rates that do not use a wet scrubber, fabric filter with bag leak detection system, an electrostatic precipitator, particulate matter CEMS, or particulate matter CPMS you must install, operate, certify, and maintain a continuous opacity monitoring system according to the procedures in paragraphs (m)(1) through (5) of this section by the compliance date specified in § 60.2105. Energy recovery units that use a CEMS to demonstrate initial and continuing compliance according to the procedures in § 60.2165(n) are not required to install a continuous opacity monitoring system and must perform the annual performance tests for the opacity consistent with § 60.2145(f):

(1) Install, operate, and maintain each continuous opacity monitoring system according to performance specification 1 of 40 CFR part 60, appendix B;

(2) Conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in § 60.13 and according to PS–1 of 40 CFR part 60, appendix B;

(3) As specified in § 60.13(e)(1), each continuous opacity monitoring system must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period;

(4) Reduce the continuous opacity monitoring system data as specified in § 60.13(h)(1); and

(5) Determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected.

(n) For coal and liquid/gas energy recovery units, incinerators, and small remote incinerators, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring particulate matter emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who continuously monitors particulate matter emissions instead of conducting performance testing using EPA Method 5 at 40 CFR part 60, appendix A–3 or monitoring with a particulate matter CPMS according to paragraph (r) of this section, must install, calibrate, maintain, and operate a PM CEMS and must comply with the requirements specified in paragraphs (n)(1) through (10) of this section:

(1) The PM CEMS must be installed, evaluated, and operated in accordance with the requirements of performance specification 11 of appendix B of this part and quality assurance requirements of procedure 2 of appendix F of this part and § 60.13. Use Method 5 or Method 5I of appendix A of this part for the PM CEMS correlation testing;

(2) The initial performance evaluation must be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.2125 or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5 performance tests, whichever is later;

(3) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility must be established according to the procedures and methods specified in § 60.2145(t)(4)(i) through (iv);

(4) The owner or operator of an affected facility must conduct an initial performance test for particulate matter emissions. If PM CEMS are elected for demonstrating compliance, and the initial performance test has not yet been conducted, then initial compliance must be determined by using the CEMS specified in paragraph (n) of this section to measure particulate matter. You must calculate a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, as defined in this subpart, using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7;

(5) Continuous compliance with the particulate matter emission limit must be determined based on the 30-day rolling average calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7 from the 1-hour arithmetic average CEMS outlet data;

(6) At a minimum, valid continuous monitoring system hourly averages must be obtained as specified in § 60.2170(e);

(7) The 1-hour arithmetic averages required under paragraph (n)(5) of this section must be expressed in milligrams per dry standard cubic meter corrected to 7 percent oxygen (dry basis) and must be used to calculate the 30-day rolling average emission concentrations. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2);

(8) All valid CEMS data must be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (n)(6) of this section are not met.

(9) The CEMS must be operated according to performance specification 11 in appendix B of this part; and,

(10) Quarterly and yearly accuracy audits and daily drift, system optics, and sample volume checks must be performed in accordance with procedure 2 in appendix F of this part.

(o) To demonstrate initial and continuous compliance with the carbon monoxide emissions limit, you may substitute use of a CEMS for the carbon monoxide initial and annual performance test:

(1) Install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 4A or 4B of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for

installation, evaluation, and operation of the CEMS; and

(2) Compliance with the carbon monoxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using CEMS outlet data, as outlined in § 60.2145(u).

(p) The owner/operator of an affected source with a bypass stack shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time and duration.

(q) For energy recovery units with a design heat input capacity of 100 MMBtu/hr or greater that do not use a carbon monoxide CEMS, you must install, operate, and maintain a oxygen analyzer system as defined in § 60.2265 according to the procedures in paragraphs (q)(1) through (4) of this section:

(1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2140;

(2) You must operate the oxygen trim system within compliance with paragraph (q)(3) of this section at all times;

(3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen according to paragraph (q)(4) of this section is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test; and

(4) You must calculate and record a 30-day rolling average oxygen concentration using equation 19–19 in section 12.4.1 of EPA Reference Method 19 of Appendix A–7 of this part.

(r) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hr and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of this section. If you elect to use a particulate matter CEMS as specified in paragraph (n) of this section, you are not required to use a PM CPMS to monitor particulate matter emissions. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure):

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with § 60.2145(l) and paragraphs (r)(1)(i) through (iii) of this section:

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps or a digital signal equivalent;

(ii) The PM CPMS must have a cycle time (*i.e.,* period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes; and

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentration increments no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2110.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps or the digital signal equivalent.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps or digital bits).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (r)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report); and

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value;

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify the operation of the emissions control device(s). Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph; and

(iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

(s) If you use a dry scrubber to comply with the emission limits of this subpart, you must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating

limits established during the hydrogen chloride performance test.

(t) If you are required to monitor clinker production because you comply with the production-rate based mercury limit for your waste-burning kiln, you must:

(1) Determine hourly clinker production by one of two methods:

(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or

(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.

(2) Determine the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before the effective date and during each quarter of source operation.

(3) Conduct accuracy checks in accordance with the procedures outlined in your site-specific monitoring plan under § 60.2145(l).

§ 60.2170 Is there a minimum amount of monitoring data I must obtain?

For each continuous monitoring system required or optionally allowed under § 60.2165, you must collect data according to this section:

(a) You must operate the monitoring system and collect data at all required intervals at all times compliance is required except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods (as specified in 60.2210(o)), and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable;

(b) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. You must use all the data collected during all other periods, including data normalized for above scale readings, in assessing the operation of the control device and associated control system; and

(c) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

Recordkeeping and Reporting

§ 60.2175 What records must I keep?

You must maintain the items (as applicable) as specified in paragraphs (a), (b), and (e) through (x) of this section for a period of at least 5 years:

(a) Calendar date of each record; and

(b) Records of the data described in paragraphs (b)(1) through (7) of this section:

(1) The CISWI charge dates, times, weights, and hourly charge rates;

(2) Liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable;

(3) Pressure drop across the wet scrubber system every 15 minutes of operation or amperage to the wet scrubber every 15 minutes of operation, as applicable;

(4) Liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable;

(5) For affected CISWIs that establish operating limits for controls other than wet scrubbers under § 60.2110(d) through (g) or § 60.2115, you must maintain data collected for all operating parameters used to determine compliance with the operating limits. For energy recovery units using activated carbon injection or a dry scrubber, you must also maintain records of the load fraction and corresponding sorbent injection rate records;

(6) If a fabric filter is used to comply with the emission limitations, you must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in § 60.2110(c);

(7) If you monitor clinker production in accordance with § 60.2165(t):

(i) Hourly clinker rate produced if clinker production is measured directly;

(ii) Hourly measured kiln feed rates and calculated clinker production rates if clinker production is not measured directly;

(iii) 30-day rolling averages for mercury in pounds per million tons of clinker produced;

(iv) The initial and quarterly accuracy of the system of measruing hourly clinker production (or feed mass flow).

(c)–(d) [Reserved]

(e) Identification of calendar dates and times for which data show a deviation from the operating limits in table 2 of this subpart or a deviation from other operating limits established under § 60.2110(d) through (g) or § 60.2115 with a description of the deviations, reasons for such deviations, and a description of corrective actions taken;

(f) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations;

(g) All documentation produced as a result of the siting requirements of §§ 60.2045 and 60.2050;

(h) Records showing the names of CISWI operators who have completed review of the information in § 60.2095(a) as required by § 60.2095(b), including the date of the initial review and all subsequent annual reviews;

(i) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2070, met the criteria for qualification under § 60.2080, and maintained or renewed their qualification under § 60.2085 or § 60.2090. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications;

(j) For each qualified operator, the phone and/or pager number at which

they can be reached during operating hours;

(k) Records of calibration of any monitoring devices as required under § 60.2165;

(l) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment;

(m) The information listed in § 60.2095(a);

(n) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required);

(o) Maintain records of the annual air pollution control device inspections that are required for each CISWI subject to the emissions limits in table 1 of this subpart or tables 5 through 8 of this subpart, any required maintenance, and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency;

(p) For continuously monitored pollutants or parameters, you must document and keep a record of the following parameters measured using continuous monitoring systems. If you monitor emissions with a CEMS, you must indicate which data are CEMS data during startup and shutdown:

(1) All 6-minute average levels of opacity;

(2) All 1-hour average concentrations of sulfur dioxide emissions;

(3) All 1-hour average concentrations of nitrogen oxides emissions;

(4) All 1-hour average concentrations of carbon monoxide emissions;

(5) All 1-hour average concentrations of particulate matter emissions;

(6) All 1-hour average concentrations of mercury emissions;

(7) All 1-hour average concentrations of HCl CEMS outputs;

(8) All 1-hour average percent oxygen concentrations; and

(9) All 1-hour average PM CPMS readings or particulate matter CEMS outputs;

(q) Records indicating use of the bypass stack, including dates, times, and durations.

(r) If you choose to stack test less frequently than annually, consistent with § 60.2155(a) through (c), you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(s) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(t) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(u) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(v) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to § 241.3(b)(1) of this chapter, you must keep a record which documents how the secondary material meets each of the legitimacy criteria under § 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to § 241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfies the definition of processing in § 241.2 and each of the legitimacy criteria of § 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under § 241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per § 241.4, you must keep records documenting that the material is a listed non-waste under § 241.4(a).

(w) Records of the criteria used to establish that the unit qualifies as a small power production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) and that the waste material the unit is proposed to burn is homogeneous.

(x) Records of the criteria used to establish that the unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)) and that the waste material the unit is proposed to burn is homogeneous.

§ 60.2180 Where and in what format must I keep my records?

All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.

§ 60.2185 What reports must I submit?

See table 4 of this subpart for a summary of the reporting requirements.

§ 60.2190 What must I submit prior to commencing construction?

You must submit a notification prior to commencing construction that includes the five items listed in paragraphs (a) through (e) of this section:

(a) A statement of intent to construct;

(b) The anticipated date of commencement of construction;

(c) All documentation produced as a result of the siting requirements of § 60.2050;

(d) The waste management plan as specified in §§ 60.2055 through 60.2065; and

(e) Anticipated date of initial startup.

§ 60.2195 What information must I submit prior to initial startup?

You must submit the information specified in paragraphs (a) through (e) of this section prior to initial startup:

(a) The type(s) of waste to be burned;

(b) The maximum design waste burning capacity;

(c) The anticipated maximum charge rate;

(d) If applicable, the petition for site-specific operating limits under § 60.2115; and

(e) The anticipated date of initial startup.

§ 60.2200 What information must I submit following my initial performance test?

You must submit the information specified in paragraphs (a) through (c) of this section no later than 60 days following the initial performance test. All reports must be signed by the facilities manager:

(a) The complete test report for the initial performance test results obtained under § 60.2135, as applicable;

(b) The values for the site-specific operating limits established in § 60.2110 or § 60.2115; and

(c) If you are using a fabric filter to comply with the emission limitations, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained as required by § 60.2165(b).

§ 60.2205 When must I submit my annual report?

You must submit an annual report no later than 12 months following the submission of the information in § 60.2200. You must submit subsequent reports no more than 12 months following the previous report. (If the unit is subject to permitting requirements under title V of the Clean Air Act, you may be required by the permit to submit these reports more frequently.)

§ 60.2210 What information must I include in my annual report?

The annual report required under § 60.2205 must include the items listed in paragraphs (a) through (o) of this section. If you have a deviation from the operating limits or the emission limitations, you must also submit deviation reports as specified in §§ 60.2215, 60.2220, and 60.2225:

(a) Company name and address;

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

(c) Date of report and beginning and ending dates of the reporting period;

(d) The values for the operating limits established pursuant to § 60.2110 or § 60.2115;

(e) If no deviation from any emission limitation or operating limit that applies to you has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period;

(f) The highest recorded 3-hour average and the lowest recorded 3-hour average (30-day average for energy recovery units), as applicable, for each operating parameter recorded for the calendar year being reported;

(g) Information recorded under § 60.2175(b)(6) and (c) through (e) for the calendar year being reported;

(h) For each performance test conducted during the reporting period, if any performance test is conducted, the process unit(s) tested, the pollutant(s) tested and the date that such performance test was conducted. Submit, following the procedure specified in § 60.2235(b)(1), the performance test report no later than the date that you submit the annual report;

(i) If you met the requirements of § 60.2155(a) or (b), and did not conduct a performance test during the reporting period, you must state that you met the requirements of § 60.2155(a) or (b), and, therefore, you were not required to conduct a performance test during the reporting period;

(j) Documentation of periods when all qualified CISWI operators were unavailable for more than 8 hours, but less than 2 weeks;

(k) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 60.11(d), including actions taken to correct a malfunction;

(l) For each deviation from an emission or operating limitation that occurs for a CISWI for which you are not using a continuous monitoring system to comply with the emission or operating limitations in this subpart, the annual report must contain the following information:

(1) The total operating time of the CISWI at which the deviation occurred during the reporting period; and

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(m) If there were periods during which the continuous monitoring system, including the CEMS, was out of control as specified in paragraph (o) of this section, the annual report must contain the following information for each deviation from an emission or operating limitation occurring for a CISWI for which you are using a continuous monitoring system to comply with the emission and operating limitations in this subpart:

(1) The date and time that each malfunction started and stopped;

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks;

(3) The date, time, and duration that each continuous monitoring system was out-of-control, including start and end dates and hours and descriptions of corrective actions taken;

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

(7) A summary of the total duration of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the CISWI at which the continuous monitoring system downtime occurred during that reporting period;

(8) An identification of each parameter and pollutant that was monitored at the CISWI;

(9) A brief description of the CISWI;

(10) A brief description of the continuous monitoring system;

(11) The date of the latest continuous monitoring system certification or audit; and

(12) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period.

(n) If there were periods during which the continuous monitoring system, including the CEMS, was not out of control as specified in paragraph (o) of this section, a statement that there were not periods during which the continuous monitoring system was out of control during the reporting period.

(o) A continuous monitoring system is out of control in accordance with the procedure in 40 CFR part 60, appendix F of this part, as if any of the following occur:

(1) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard;

(2) The continuous monitoring system fails a performance test audit (*e.g.,* cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; and

(3) The continuous opacity monitoring system calibration drift exceeds two times the limit in the applicable performance specification in the relevant standard.

§ 60.2215 What else must I report if I have a deviation from the operating limits or the emission limitations?

(a) You must submit a deviation report if any recorded 3-hour average (30-day average for energy recovery units or for PM CPMS) parameter level is above the maximum operating limit or below the minimum operating limit established under this subpart, if the bag leak detection system alarm sounds for more than 5 percent of the operating time for the 6-month reporting period, if a performance test was conducted that deviated from any emission limitation, if a 30-day average measured using CEMS deviated from any emission limitation.

(b) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).

§ 60.2220 What must I include in the deviation report?

In each report required under § 60.2215, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, include the six items described in paragraphs (a) through (d) of this section:

(a) The calendar dates and times your unit deviated from the emission limitations or operating limit requirements;

(b) The averaged and recorded data for those dates;

(c) Durations and causes of the following:

(1) Each deviation from emission limitations or operating limits and your corrective actions;

(2) Bypass events and your corrective actions; and

(d) A copy of the operating limit monitoring data during each deviation and for any test report that documents the emission levels the process unit(s) tested, the pollutant(s) tested and the date that the performance test was conducted. Submit, following the procedure specified in § 60.2235(b)(1), the performance test report no later than the date that you submit the deviation report.

§ 60.2225 What else must I report if I have a deviation from the requirement to have a qualified operator accessible?

(a) If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in paragraphs (a)(1) and (2) of this section:

(1) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (a)(1)(i) through (iii) of this section:

(i) A statement of what caused the deviation;

(ii) A description of what you are doing to ensure that a qualified operator is accessible; and

(iii) The date when you anticipate that a qualified operator will be available.

(2) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (a)(2)(i) through (iii) of this section:

(i) A description of what you are doing to ensure that a qualified operator is accessible;

(ii) The date when you anticipate that a qualified operator will be accessible; and

(iii) Request approval from the Administrator to continue operation of the CISWI.

(b) If your unit was shut down by the Administrator, under the provisions of § 60.2100(b)(2), due to a failure to provide an accessible qualified operator, you must notify the Administrator that you are resuming operation once a qualified operator is accessible.

§ 60.2230 Are there any other notifications or reports that I must submit?

(a) Yes. You must submit notifications as provided by § 60.7.

(b) If you cease combusting solid waste but continue to operate, you must provide 30 days prior notice of the effective date of the waste-to-fuel switch, consistent with 60.2145(a). The notification must identify:

(1) The name of the owner or operator of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;

(2) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(3) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(4) The date on which you became subject to the currently applicable emission limits; and

(5) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (*i.e.,* the effective date of the waste-to-fuel switch), consistent with paragraphs (b)(2) and (3) of this section.

§ 60.2235 In what form can I submit my reports?

(a) Submit initial, annual and deviation reports electronically or in paper format, postmarked on or before the submittal due dates. Beginning on April 16, 2021 or once the reporting form has been available in CEDRI for 1 year, whichever is later, you must submit subsequent reports on or before the submittal dates to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI),which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www3.epa.gov/ttn/chief/cedri/index.html*). The date forms become available in CEDRI will be listed on the CEDRI website. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the report is submitted.

(b) Submit results of each performance test and CEMS performance evaluation required by this subpart as follows:

(1) Within 60 days after the date of completing each performance test (*see* § 60.8) required by this subpart, you must submit the results of the performance test following the procedure specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this section:

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www3.epa.gov/ttn/chief/ert/ert_info.html*) at the time of the test, you must submit the results of the performance test to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (*https://cdx.epa.gov/*).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the XML schema listed on the EPA's ERT website. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(2) Within 60 days after the date of completing each continuous emissions monitoring system performance evaluation you must submit the results of the performance evaluation following the procedure specified in either paragraph (b)(2)(i) or (b)(2)(ii) of this section:

(i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the

evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT website. If you claim that some of the performance evaluation information being submitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and

(ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 60.4.

(c) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(d) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

§ 60.2240 Can reporting dates be changed?

If the Administrator agrees, you may change the semiannual or annual reporting dates. See § 60.19(c) for procedures to seek approval to change your reporting date.

Title V Operating Permits

§ 60.2242 Am I required to apply for and obtain a Title V operating permit for my unit?

Yes. Each CISWI and ACI subject to standards under this subpart must operate pursuant to a permit issued under Section 129(e) and Title V of the Clean Air Act.

Air Curtain Incinerators (ACIs)

§ 60.2245 What is an air curtain incinerator?

(a) An ACI operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.

(b) Air curtain incinerators that burn only the materials listed in paragraphs (b)(1) through (3) of this section are only required to meet the requirements under § 60.2242 and under ''Air Curtain Incinerators'' (§§ 60.2245 through 60.2260):

(1) 100 percent wood waste;

(2) 100 percent clean lumber; and

(3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

§ 60.2250 What are the emission limitations for air curtain incinerators?

Within 60 days after your ACI reaches the charge rate at which it will operate, but no later than 180 days after its initial startup, you must meet the two limitations specified in paragraphs (a) and (b) of this section:

(a) Maintain opacity to less than or equal to 10 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (b) of this section; and

(b) Maintain opacity to less than or equal to 35 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.

§ 60.2255 How must I monitor opacity for air curtain incinerators?

(a) Use Method 9 of appendix A of this part to determine compliance with the opacity limitation.

(b) Conduct an initial test for opacity as specified in § 60.8.

(c) After the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of your previous test.

§ 60.2260 What are the recordkeeping and reporting requirements for air curtain incinerators?

(a) Prior to commencing construction on your ACI, submit the three items described in paragraphs (a)(1) through (3) of this section:

(1) Notification of your intent to construct the ACI;

(2) Your planned initial startup date; and

(3) Types of materials you plan to burn in your ACI.

(b) Keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.

(c) Make all records available for submittal to the Administrator or for an inspector's onsite review.

(d) You must submit the results (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) of the initial opacity tests no later than 60 days following the initial test. Submit annual opacity test results within 12 months following the previous report.

(e) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date.

(f) Keep a copy of the initial and annual reports onsite for a period of 5 years.

Definitions

§ 60.2265 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and subpart A (General Provisions) of this part.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes periods when this unit is not operating. The 720 hours should be consecutive, but not necessarily continuous if operations are intermittent.

Administrator means the Administrator of the U.S. Environmental Protection Agency or his/her authorized representative or Administrator of a State Air Pollution Control Agency.

Air curtain incinerator (ACI) means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Auxiliary fuel means natural gas, liquified petroleum gas, fuel oil, or diesel fuel.

Average annual heat input rate means annual heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Burn-off oven means any rack reclamation unit, part reclamation unit, or drum reclamation unit. A burn-off oven is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

Calendar quarter means three consecutive months (nonoverlapping) beginning on: January 1, April 1, July 1, or October 1.

Calendar year means 365 consecutive days starting on January 1 and ending on December 31.

CEMS data during startup and shutdown means the following:

(1) For incinerators and small remote incinerators: CEMS data collected during the first hours of a CISWI startup from a cold start until waste is fed to the unit and the hours of operation following the cessation of waste material being fed to the CISWI during a unit shutdown. For each startup event, the length of time that CEMS data may be claimed as being CEMS data during startup must be 48 operating hours or less. For each shutdown event, the length of time that CEMS data may be claimed as being CEMS data during shutdown must be 24 operating hours or less;

(2) For energy recovery units: CEMS data collected during the startup or shutdown periods of operation. Startup begins with either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling or process purposes, or producing electricity, or the firing of fuel in a boiler or process heater for any purpose after a shutdown event. Startup ends four hours after when the boiler or process heater makes useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier. Shutdown begins when the boiler or process heater no longer makes useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler or process heater, whichever is earlier. Shutdown ends when the boiler or process heater no longer makes useful thermal energy (such as steam or heat) for heating, cooling, or process purposes and/or generates electricity, and no fuel is being combusted in the boiler or process heater; and

(3) For waste-burning kilns: CEMS data collected during the periods of kiln operation that do not include normal operations. Startup means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first. Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

Chemical recovery unit means combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. A chemical recovery unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart. The following seven types of units are considered chemical recovery units:

(1) Units burning only pulping liquors (*i.e.,* black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process;

(2) Units burning only spent sulfuric acid used to produce virgin sulfuric acid;

(3) Units burning only wood or coal feedstock for the production of charcoal;

(4) Units burning only manufacturing byproduct streams/residue containing

catalyst metals that are reclaimed and reused as catalysts or used to produce commercial grade catalysts;

(5) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds;

(6) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes; and

(7) Units burning only photographic film to recover silver.

Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

Clean lumber means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

Commercial and industrial solid waste incineration unit (CISWI) means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241. If the operating unit burns materials other than traditional fuels as defined in § 241.2 that have been discarded, and you do not keep and produce records as required by § 60.2175(v), the operating unit is a CISWI. While not all CISWIs will include all of the following components, a CISWI includes, but is not limited to, the solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI does not include air pollution control equipment or the stack. The CISWI boundary starts at the solid waste hopper (if applicable) and extends through two areas: The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI includes all ash handling systems connected to the bottom ash handling system.

Contained gaseous material means gases that are in a container when that container is combusted.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters. A particulate matter continuous parameter monitoring system (PM CPMS) is a type of CMS.

Cyclonic burn barrel means a combustion device for waste materials that is attached to a 55 gallon, open-head drum. The device consists of a lid, which fits onto and encloses the drum, and a blower that forces combustion air into the drum in a cyclonic manner to enhance the mixing of waste material and air. A cyclonic burn barrel is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation, operating limit, or operator qualification and accessibility requirements; and

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Dioxins/furans means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Discard means, for purposes of this subpart and 40 CFR part 60, subpart DDDD, only, burned in an incineration unit without energy recovery.

Drum reclamation unit means a unit that burns residues out of drums (*e.g.,* 55 gallon drums) so that the drums can be reused.

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Energy recovery means the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating.

Energy recovery unit means a combustion unit combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for energy recovery. Energy recovery units include units that would be considered boilers and process heaters if they did not combust solid waste.

Energy recovery unit designed to burn biomass (Biomass) means an energy recovery unit that burns solid waste, biomass, and non-coal solid materials but less than 10 percent coal, on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn coal (Coal) means an energy recovery unit that burns solid waste and at least 10 percent coal on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn liquid waste materials and gas (Liquid/gas) means an energy recovery unit that burns a liquid waste with liquid or gaseous fuels not combined with any solid fuel or waste materials.

Energy recovery unit designed to burn solid materials (Solids) includes energy recovery units designed to burn coal and energy recovery units designed to burn biomass.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Foundry sand thermal reclamation unit means a type of part reclamation unit that removes coatings that are on foundry sand. A foundry sand thermal reclamation unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Incinerator means any furnace used in the process of combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for the purpose of reducing the volume of the waste by removing combustible matter. Incinerator designs include single chamber and two-chamber.

In-line coal mill means those coal mills using kiln exhaust gases in their process. Coal mills with a heat source other than the kiln or coal mills using exhaust gases from the clinker cooler alone are not an in-line coal mill.

In-line kiln/raw mill means a system in a Portland Cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is

capable of operating without the raw mill operating, but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means an oven or furnace, including any associated preheater or precalciner devices, in-line raw mills, in-line coal mills or alkali bypasses used for processing a substance by burning, firing or drying. Kilns include cement kilns that produce clinker by heating limestone and other materials for subsequent production of Portland Cement. Because the alkali bypass, in-line raw mill and in-line coal mill are considered an integral part of the kiln, the kiln emissions limits also apply to the exhaust of the alkali bypass, in-line raw mill and in-line coal mill.

Laboratory analysis unit means units that burn samples of materials for the purpose of chemical or physical analysis. A laboratory analysis unit is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Load fraction means the actual heat input of an energy recovery unit divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (*e.g.,* for 50 percent load the load fraction is 0.5).

Low-level radioactive waste means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured during the most recent particulate matter or mercury performance test demonstrating compliance with the applicable emission limits.

Modification or *modified CISWI* means a CISWI that has been changed later than August 7, 2013 and that meets one of two criteria:

(1) The cumulative cost of the changes over the life of the unit exceeds 50 percent of the original cost of building and installing the CISWI (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI used to calculate these costs, see the definition of CISWI; and

(2) Any physical change in the CISWI or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.

Municipal solid waste or municipal-type solid waste means household, commercial/retail, or institutional waste. Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes materials discarded by schools, by hospitals (nonmedical), by nonmanufacturing activities at prisons and government facilities, and other similar establishments or facilities. Household, commercial/retail, and institutional waste does include yard waste and refuse-derived fuel. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which include railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any amount of solid waste is combusted at any time in the CISWI.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler or process heater, firebox, or other appropriate location. This definition includes oxygen trim systems and certified oxygen CEMS. The source owner or operator is responsible to install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating range. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Part reclamation unit means a unit that burns coatings off parts (*e.g.,* tools, equipment) so that the parts can be reconditioned and reused.

Particulate matter means total particulate matter emitted from CISWIs as measured by Method 5 or Method 29 of appendix A of this part.

Pathological waste means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Process change means any of the following physical or operational changes:

(1) A physical change (maintenance activities excluded) to the CISWI which may increase the emission rate of any air pollutant to which a standard applies;

(2) An operational change to the CISWI where a new type of non-hazardous secondary material is being combusted;

(3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the CISWI (*e.g.,* replacing an electrostatic precipitator with a fabric filter); and

(4) An operational change to the air pollution control devices used to comply with the emission limits for the affected CISWI (*e.g.,* change in the sorbent injection rate used for activated carbon injection).

Rack reclamation unit means a unit that burns the coatings off racks used to hold small items for application of a coating. The unit burns the coating overspray off the rack so the rack can be reused.

Raw mill means a ball or tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed

during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Reconstruction means rebuilding a CISWI and meeting two criteria:

(1) The reconstruction begins on or after August 7, 2013; and

(2) The cumulative cost of the construction over the life of the incineration unit exceeds 50 percent of the original cost of building and installing the CISWI (not including land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI used to calculate these costs, see the definition of CISWI.

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels:

(1) Low-density fluff refuse-derived fuel through densified refuse-derived fuel; and

(2) Pelletized refuse-derived fuel.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representatives is approved in advance by the permitting authority;

(2) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;

(3) For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (*e.g.,* a Regional Administrator of EPA); or

(4) For affected facilities:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or

(ii) The designated representative for any other purposes under part 60.

Shutdown means, for incinerators and small, remote incinerators, the period of time after all waste has been combusted in the primary chamber.

Small, remote incinerator means an incinerator that combusts solid waste (as that term is defined by the Administrator in 40 CFR part 241) and combusts 3 tons per day or less solid waste and is more than 25 miles driving distance to the nearest municipal solid waste landfill.

Soil treatment unit means a unit that thermally treats petroleum-contaminated soils for the sole purpose of site remediation. A soil treatment unit may be direct-fired or indirect fired. A soil treatment unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Solid waste means the term solid waste as defined in 40 CFR 241.2.

Solid waste incineration unit means a distinct operating unit of any facility which combusts any solid waste (as that term is defined by the Administrator in 40 CFR part 241) material from commercial or industrial establishments or the general public (including single and multiple residences, hotels and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act. The term ''solid waste incineration unit'' does not include:

(1) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;

(2) Qualifying small power production facilities, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 769(17)(C)), or qualifying cogeneration facilities, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes; or

(3) Air curtain incineratorsprovided that such incinerators only burn wood wastes, yard wastes, and clean lumber and that such ACIs comply with opacity limitations to be established by the Administrator by rule.

Space heater means a unit that meets the requirements of 40 CFR 279.23. A space heater is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Standard conditions, when referring to units of measure, means a temperature of 68 °F (20 °C) and a pressure of 1 atmosphere (101.3 kilopascals).

Startup period means, for incinerators and small, remote incinerators, the period of time between the activation of the system and the first charge to the unit.

Useful thermal energy means energy (*i.e.,* steam, hot water, or process heat) that meets the minimum operating temperature and/or pressure required by any energy use system that uses energy provided by the affected energy recovery unit.

Waste-burning kiln means a kiln that is heated, in whole or in part, by combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241). Secondary materials used in Portland cement kilns shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel.

Wet scrubber means an add-on air pollution control device that uses an aqueous or alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

Wood waste means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

(1) Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands;

(2) Construction, renovation, or demolition wastes; and

(3) Clean lumber.

TABLE 1 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR INCINERATORS FOR WHICH CONSTRUCTION IS COMMENCED AFTER NOVEMBER 30, 1999, BUT NO LATER THAN JUNE 4, 2010, OR FOR WHICH MODIFICATION OR RECONSTRUCTION IS COMMENCED ON OR AFTER JUNE 1, 2001, BUT NO LATER THAN AUGUST 7, 2013

For the air pollutant	You must meet this emission limitation [1]	Using this averaging time [2]	And determining compliance using this method [2]
Cadmium	0.004 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part).
Carbon monoxide	157 parts per million by dry volume.	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxin/Furan (toxic equivalency basis).	0.41 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 23 of appendix A–7 of this part).
Hydrogen chloride	62 parts per million by dry volume.	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.04 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part).
Mercury	0.47 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part).
Nitrogen oxides	388 parts per million by dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Opacity	10 percent	6-minute averages	Performance test (Method 9 of appendix A of this part).
Particulate matter	70 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run)	Performance test (Method 5 or 29 of appendix A of this part).
Sulfur dioxide	20 parts per million by dry volume.	3-run average (For Method 6, collect a minimum volume of 20 liters per run. For Method 6C, collect sample for a minimum duration of 1 hour per run).	Performance test (Method 6 or 6C at 40 CFR part 60, appendix A–4).

[1] All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions.

[2] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2145 and 60.2165. As prescribed in § 60.2145(u), if you use a CEMS or an integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

TABLE 2 TO SUBPART CCCC OF PART 60—OPERATING LIMITS FOR WET SCRUBBERS

For these operating parameters	You must establish these operating limits	And monitoring using these minimum frequencies		
		Data measurement	Data recording	Averaging time
Charge rate	Maximum charge rate	Continuous	Every hour	Daily (batch units) 3-hour rolling (continuous and intermittent units).[1]
Pressure drop across the wet scrubber or amperage to wet scrubber.	Minimum pressure drop or amperage.	Continuous	Every 15 minutes	3-hour rolling.[1]
Scrubber liquor flow rate	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling.[1]
Scrubber liquor pH	Minimum pH	Continuous	Every 15 minutes	3-hour rolling.[1]

[1] Calculated each hour as the average of the previous 3 operating hours.

TABLE 3 TO SUBPART CCCC OF PART 60—TOXIC EQUIVALENCY FACTORS

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

TABLE 4 TO SUBPART CCCC OF PART 60—SUMMARY OF REPORTING REQUIREMENTS [1]

Report	Due date	Contents	Reference
Preconstruction report	Prior to commencing construction	• Statement of intent to construct • Anticipated date of commencement of construction. • Documentation for siting requirements • Waste management plan • Anticipated date of initial startup.	§ 60.2190.
Startup notification	Prior to initial startup	• Type of waste to be burned • Maximum design waste burning capacity. • Anticipated maximum charge rate • If applicable, the petition for site-specific operating limits.	§ 60.2195.
Initial test report	No later than 60 days following the initial performance test.	• Complete test report for the initial performance test. • The values for the site-specific operating limits. • Installation of bag leak detection system for fabric filter.	§ 60.2200.
Annual report	No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report.	• Name and address • Statement and signature by responsible official. • Date of report • Values for the operating limits • Highest recorded 3-hour average and the lowest 3-hour average, as applicable, (or 30-day average, if applicable) for each operating parameter recorded for the calendar year being reported. • For each performance test conducted during the reporting period, if any performance test is conducted, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted. • If a performance test was not conducted during the reporting period, a statement that the requirements of § 60.2155(a) were met. • Documentation of periods when all qualified CISWI operators were unavailable for more than 8 hours but less than 2 weeks. • If you are conducting performance tests once every 3 years consistent with § 60.2155(a), the date of the last 2 performance tests, a comparison of the emission level you achieved in the last 2 performance tests to the 75 percent emission limit threshold required in § 60.2155(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. • Any malfunction, deviation, or continuous monitoring system out of control periods information as specified in § 60.2210(k) through (o).	§§ 60.2205 and 60.2210.
Emission limitation or operating limit deviation report.	By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year.	• Dates and times of deviation • Averaged and recorded data for those dates. • Duration and causes of each deviation and the corrective actions taken. • Copy of operating limit monitoring data and, if any performance test was conducted that documents emission levels, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted. • Dates, times and causes for monitor downtime incidents.	§ 60.2215 and 60.2220.

TABLE 4 TO SUBPART CCCC OF PART 60—SUMMARY OF REPORTING REQUIREMENTS [1]—Continued

Report	Due date	Contents	Reference
Qualified operator deviation notification.	Within 10 days of deviation	• Statement of cause of deviation • Description of efforts to have an accessible qualified operator. • The date a qualified operator will be accessible.	§ 60.2225(a)(1).
Qualified operator deviation status report.	Every 4 weeks following deviation	• Description of efforts to have an accessible qualified operator. • The date a qualified operator will be accessible. • Request for approval to continue operation.	§ 60.2225(a)(2).
Qualified operator deviation notification of resumed operation.	Prior to resuming operation	• Notification that you are resuming operation.	§ 60.2225(b).

[1] This table is only a summary, see the referenced sections of the rule for the complete requirements.

TABLE 5 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR INCINERATORS THAT COMMENCED CONSTRUCTION AFTER JUNE 4, 2010, OR THAT COMMENCED RECONSTRUCTION OR MODIFICATION AFTER AUGUST 7, 2013

For the air pollutant	You must meet this emission limitation [1]	Using this averaging time [2]	And determining compliance using this method [2]
Cadmium	0.0023 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meter per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8 of this part). Use ICPMS for the analytical finish.
Carbon monoxide	17 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxin/furan (Total Mass Basis).	0.58 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxin/furan (toxic equivalency basis).	0.13 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meter per run).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods	Visible emission test (Method 22 at 40 CFR part 60, appendix A–7).
Hydrogen chloride	0.091 parts per million by dry volume.	3-run average (For Method 26, collect a minimum volume of 360 liters per run. For Method 26A, collect a minimum volume of 3 dry standard cubic meters per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.015 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 29 of appendix A–8 at 40 CFR part 60). Use ICPMS for the analytical finish.
Mercury	0.00084 milligrams per dry standard cubic meter.	3-run average (collect enough volume to meet a detection limit data quality objective of 0.03 ug/dry standard cubic meter).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[3]
Nitrogen oxides	23 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter (filterable).	18 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters per run).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8 at 40 CFR part 60).
Sulfur dioxide	11 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6C at 40 CFR part 60, appendix A–4).

[1] All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the Total Mass Limit or the toxic equivalency basis limit.

[2] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2145 and 60.2165. As prescribed in § 60.2145(u), if you use a CEMS or an integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[3] Incorporated by reference, *see* § 60.17.

TABLE 6 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR ENERGY RECOVERY UNITS THAT COMMENCED CONSTRUCTION AFTER JUNE 4, 2010, OR THAT COMMENCED RECONSTRUCTION OR MODIFICATION AFTER AUGUST 7, 2013

For the air pollutant	You must meet this emission limitation [1]		Using this averaging time [2]	And determining compliance using this method [2]
	Liquid/gas	Solids		
Cadmium	0.023 milligrams per dry standard cubic meter.	Biomass-0.0014 milligrams per dry standard cubic meter. Coal-0.0017 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Carbon monoxide	35 parts per million dry volume	Biomass-240 parts per million dry volume. Coal-95 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxin/furans (Total Mass Basis).	No Total Mass Basis limit, must meet the toxic equivalency basis limit below.	Biomass-0.52 nanograms per dry standard cubic meter. Coal-5.1 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	0.093 nanograms per dry standard cubic meter.	Biomass-0.076 nanograms per dry standard cubic meter [3]. Coal-0.075 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 23 of appendix A–7 of this part).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods.	Visible emission test (Method 22 at 40 CFR part 60, appendix A–7).	Fugitive ash.
Hydrogen chloride	14 parts per million dry volume	Biomass-0.20 parts per million dry volume. Coal-58 parts per million dry volume.	3-run average (For Method 26, collect a minimum volume of 360 liters per run. For Method 26A, collect a minimum volume of 3 dry standard cubic meters per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.096 milligrams per dry standard cubic meter.	Biomass-0.014 milligrams per dry standard cubic meter. Coal-0.057 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.00056 milligrams per dry standard cubic meter.	Biomass-0.0022 milligrams per dry standard cubic meter. Coal-0.013 milligrams per dry standard cubic meter.	3-run average (collect enough volume to meet an in-stack detection limit data quality objective of 0.03 ug/dscm).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[3]
Nitrogen oxides	76 parts per million dry volume	Biomass-290 parts per million dry volume. Coal-460 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter (filterable).	110 milligrams per dry standard cubic meter.	Biomass-5.1 milligrams per dry standard cubic meter. Coal-130 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8) if the unit has an annual average heat input rate less than 250 MMBtu/hr; or PM CPMS (as specified in §60.2145(x)) if the unit has an annual average heat input rate equal to or greater than 250 MMBtu/hr.
Sulfur dioxide	720 parts per million dry volume.	Biomass-7.3 parts per million dry volume. Coal-850 parts per million dry volume.	3-run average (for Method 6, collect a minimum of 60 liters, for Method 6C,1 hour minimum sample time per run).	Performance test (Method 6 or 6C at 40 CFR part 60, appendix A–4).

[1] All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the Total Mass Basis limit or the toxic equivalency basis limit.

[2] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§60.2145 and 60.2165. As prescribed in §60.2145(u), if you use a CEMS or an integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[3] Incorporated by reference, *see* §60.17.

TABLE 7 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR WASTE-BURNING KILNS THAT COMMENCED CONSTRUCTION AFTER JUNE 4, 2010, OR RECONSTRUCTION OR MODIFICATION AFTER AUGUST 7, 2013

For the air pollutant	You must meet this emission limitation [1]	Using this averaging time [2]	And determining compliance using this method [2 3]
Cadmium	0.0014 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Carbon monoxide	90 (long kilns)/190 (preheater/precalciner) parts per million dry volume.	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis).	0.51 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters per run).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	0.075 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).

TABLE 7 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR WASTE-BURNING KILNS THAT COMMENCED CONSTRUCTION AFTER JUNE 4, 2010, OR RECONSTRUCTION OR MODIFICATION AFTER AUGUST 7, 2013—Continued

For the air pollutant	You must meet this emission limitation [1]	Using this averaging time [2]	And determining compliance using this method [2 3]
Hydrogen chloride	3.0 parts per million dry volume.	3-run average (1 hour minimum sample time per run) or 30-day rolling average if HCl CEMS is being used.	If a wet scrubber or dry scrubber is used, performance test (Method 321 at 40 CFR part 63, appendix A). If a wet scrubber or dry scrubber is not used, HCl CEMS as specified in § 60.2145(j).
Lead	0.014 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0037 milligrams per dry standard cubic meter. Or 21 pounds/million tons of clinker [3].	30-day rolling average	Mercury CEMS or integrated sorbent trap monitoring system (performance specification 12A or 12B, respectively, of appendix B and procedure 5 of appendix F of this part), as specified in § 60.2145(j).
Nitrogen oxides	200 parts per million dry volume.	30-day rolling average	Nitrogen oxides CEMS (performance specification 2 of appendix B and procedure 1 of appendix F of this part).
Particulate matter (filterable)	4.9 milligrams per dry standard cubic meter.	30-day rolling average	PM CPMS (as specified in § 60.2145(x)).
Sulfur dioxide	28 parts per million dry volume.	30-day rolling average	Sulfur dioxide CEMS (performance specification 2 of appendix B and procedure 1 of appendix F of this part).

[1] All emission limitations are measured at 7 percent oxygen (except for CEMS and integrated sorbent trap monitoring system data during startup and shutdown), dry basis at standard conditions. For dioxins/furans, you must meet either the Total Mass Basis limit or the toxic equivalency basis limit.

[2] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2145 and 60.2165. As prescribed in § 60.2145(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[3] Alkali bypass and in-line coal mill stacks are subject to performance testing only, as specified in § 60.2145(y)(3). They are not subject to the CEMS, integrated sorbent trap monitoring system, or CPMS requirements that otherwise may apply to the main kiln exhaust.

TABLE 8 TO SUBPART CCCC OF PART 60—EMISSION LIMITATIONS FOR SMALL, REMOTE INCINERATORS THAT COMMENCED CONSTRUCTION AFTER JUNE 4, 2010, OR THAT COMMENCED RECONSTRUCTION OR MODIFICATION AFTER AUGUST 7, 2013

For the air pollutant	You must meet this emission limitation [1]	Using this averaging time [2]	And determining compliance using this method [2]
Cadmium	0.67 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8).
Carbon monoxide	13 parts per million dry volume.	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis).	1,800 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	31 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods	Visible emissions test (Method 22 at 40 CFR part 60, appendix A–7).
Hydrogen chloride	200 parts per million by dry volume.	3-run average (For Method 26, collect a minimum volume of 60 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	2.0 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0035 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784–02 (Reapproved 2008) [2], collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum volume as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[3]
Nitrogen oxides	170 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter (filterable)	270 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8).
Sulfur dioxide	1.2 parts per million dry volume.	3-run average (1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).

[1] All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the Total Mass Basis limit or the toxic equivalency basis limit.

[2] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2145 and 60.2165. As prescribed in § 60.2145(u), if you use a CEMS or an integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[3] Incorporated by reference, *see* § 60.17.

■ 3. Revise subpart DDDD to read as follows:

Sec.

Subpart DDDD—Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

Subpart DDDD—Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

Introduction

§ 60.2500 What is the purpose of this subpart?

This subpart establishes emission guidelines and compliance schedules for the control of emissions from commercial and industrial solid waste incineration units (CISWIs) and air curtain incinerators (ACIs). The pollutants addressed by these emission guidelines are listed in table 2 of this subpart and tables 6 through 9 of this subpart. These emission guidelines are developed in accordance with sections 111(d) and 129 of the Clean Air Act and subpart B of this part.

§ 60.2505 Am I affected by this subpart?

(a) If you are the Administrator of an air quality program in a state or United States protectorate with one or more existing CISWIs that meet the criteria in paragraphs (b) through (d) of this section, you must submit a state plan to U.S. Environmental Protection Agency (EPA) that implements the emission guidelines contained in this subpart.

(b) You must submit a state plan to EPA by December 3, 2001 for incinerator units that commenced construction on or before November 30, 1999 and that were not modified or reconstructed after June 1, 2001.

(c) You must submit a state plan that meets the requirements of this subpart and contains the more stringent emission limit for the respective pollutant in table 6 of this subpart or table 1 of subpart CCCC of this part to EPA by February 7, 2014 for incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction after June 1, 2001 but no later than August 7, 2013.

(d) You must submit a state plan to EPA that meets the requirements of this subpart and contains the emission limits in tables 7 through 9 of this subpart by February 7, 2014, for CISWIs other than incinerator units that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.

§ 60.2510 Is a state plan required for all states?

No. You are not required to submit a state plan if there are no existing CISWIs in your state, and you submit a negative declaration letter in place of the state plan.

§ 60.2515 What must I include in my state plan?

(a) You must include the nine items described in paragraphs (a)(1) through (9) of this section in your state plan:

(1) Inventory of affected CISWIs, including those that have ceased operation but have not been dismantled;

(2) Inventory of emissions from affected CISWIs in your state;

(3) Compliance schedules for each affected CISWI;

(4) Emission limitations, operator training and qualification requirements, a waste management plan, and operating limits for affected CISWIs that are at least as protective as the emission guidelines contained in this subpart;

(5) Performance testing, recordkeeping, and reporting requirements;

(6) Certification that the hearing on the state plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission;

(7) Provision for state progress reports to EPA;

(8) Identification of enforceable state mechanisms that you selected for implementing the emission guidelines of this subpart; and

(9) Demonstration of your state's legal authority to carry out the sections 111(d) and 129 state plan.

(b) Your state plan may deviate from the format and content of the emission guidelines contained in this subpart. However, if your state plan does deviate in content, you must demonstrate that your state plan is at least as protective as the emission guidelines contained in this subpart. Your state plan must address regulatory applicability, increments of progress for retrofit, operator training and qualification, a waste management plan, emission limitations, performance testing, operating limits, monitoring, recordkeeping and reporting, and ACI requirements.

(c) You must follow the requirements of subpart B of this part (Adoption and Submittal of State Plans for Designated Facilities) in your state plan.

§ 60.2520 Is there an approval process for my state plan?

Yes. The EPA will review your state plan according to § 60.27.

§ 60.2525 What if my state plan is not approvable?

(a) If you do not submit an approvable state plan (or a negative declaration letter) by December 2, 2002, EPA will develop a federal plan according to § 60.27 to implement the emission guidelines contained in this subpart. Owners and operators of CISWIs not covered by an approved state plan must comply with the federal plan. The federal plan is an interim action and will be automatically withdrawn when your state plan is approved.

(b) If you do not submit an approvable state plan (or a negative declaration letter) to EPA that meets the requirements of this subpart and contains the emission limits in tables 6 through 9 of this subpart for CISWIs that commenced construction on or before June 4, 2010 and incinerator or ACIs that commenced reconstruction or modification on or after June 1, 2001 but no later than August 7, 2013, then EPA will develop a federal plan according to § 60.27 to implement the emission guidelines contained in this subpart. Owners and operators of CISWIs not covered by an approved state plan must comply with the federal plan. The federal plan is an interim action and will be automatically withdrawn when your state plan is approved.

§ 60.2530 Is there an approval process for a negative declaration letter?

No. The EPA has no formal review process for negative declaration letters. Once your negative declaration letter has been received, EPA will place a copy in the public docket and publish a document in the **Federal Register**. If, at a later date, an existing CISWI is found in your state, the federal plan implementing the emission guidelines contained in this subpart would automatically apply to that CISWI until your state plan is approved.

§ 60.2535 What compliance schedule must I include in my state plan?

(a) For CISWIs in the incinerator subcategory and ACIs that commenced construction on or before November 30, 1999, your state plan must include compliance schedules that require CISWIs in the incinerator subcategory and ACIs to achieve final compliance as expeditiously as practicable after approval of the state plan but not later than the earlier of the two dates specified in paragraphs (a)(1) and (2) of this section:

(1) December 1, 2005; and

(2) Three years after the effective date of state plan approval.

(b) For CISWIs in the incinerator subcategory and ACIs that commenced construction after November 30, 1999, but on or before June 4, 2010 or that commenced reconstruction or modification on or after June 1, 2001 but no later than August 7, 2013, and for CISWIs in the small remote incinerator, energy recovery unit, and waste-burning kiln subcategories that commenced construction before June 4, 2010, your state plan must include compliance schedules that require CISWIs to achieve final compliance as expeditiously as practicable after approval of the state plan but not later than the earlier of the two dates specified in paragraphs (b)(1) and (2) of this section:

(1) February 7, 2018; and

(2) Three years after the effective date of State plan approval.

(c) For compliance schedules more than 1 year following the effective date of State plan approval, State plans must include dates for enforceable increments of progress as specified in § 60.2580.

§ 60.2540 Are there any state plan requirements for this subpart that apply instead of the requirements specified in subpart B?

Yes. Subpart B establishes general requirements for developing and processing section 111(d) plans. This subpart applies instead of the requirements in subpart B of this part for paragraphs (a) and (b) of this section:

(a) State plans developed to implement this subpart must be as protective as the emission guidelines contained in this subpart. State plans must require all CISWIs to comply by the dates specified in § 60.2535. This applies instead of the option for case-by-case less stringent emission standards and longer compliance schedules in § 60.24(f); and

(b) State plans developed to implement this subpart are required to include two increments of progress for the affected CISWIs. These two minimum increments are the final control plan submittal date and final compliance date in § 60.21(h)(1) and (5). This applies instead of the requirement of § 60.24(e)(1) that would require a state plan to include all five increments of progress for all CISWIs.

§ 60.2541 In lieu of a state plan submittal, are there other acceptable option(s) for a state to meet its Clean Air Act section 111(d)/129(b)(2) obligations?

Yes, a state may meet its Clean Air Act section 111(d)/129 obligations by submitting an acceptable written request for delegation of the federal plan that meets the requirements of this section. This is the only other option for a state to meet its Clean Air Act section 111(d)/129 obligations.

(a) An acceptable federal plan delegation request must include the following:

(1) A demonstration of adequate resources and legal authority to administer and enforce the federal plan;

(2) The items under § 60.2515(a)(1), (2) and (7);

(3) Certification that the hearing on the state delegation request, similar to the hearing for a state plan submittal, was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission; and

(4) A commitment to enter into a Memorandum of Agreement with the Regional Administrator who sets forth the terms, conditions, and effective date of the delegation and that serves as the mechanism for the transfer of authority. Additional guidance and information is given in EPA's Delegation Manual, Item 7–139, Implementation and Enforcement of 111(d)(2) and 111(d)/(2)/129(b)(3) federal plans.

(b) A state with an already approved CISWI Clean Air Act section 111(d)/129 state plan is not precluded from receiving EPA approval of a delegation request for the revised federal plan, providing the requirements of paragraph (a) of this section are met, and at the time of the delegation request, the state also requests withdrawal of EPA's previous state plan approval.

(c) A state's Clean Air Act section 111(d)/129 obligations are separate from its obligations under Title V of the Clean Air Act.

§ 60.2542 What authorities will not be delegated to state, local, or tribal agencies?

The authorities that will not be delegated to state, local, or tribal agencies are specified in paragraphs (a) through (i) of this section:

(a) Approval of alternatives to the emission limitations in tables 2, 6, 7, 8, and 9 of this subpart and operating limits established under § 60.2675;

(b) Approval of major alternatives to test methods;

(c) Approval of major alternatives to monitoring;

(d) Approval of major alternatives to recordkeeping and reporting;

(e) The requirements in § 60.2680;

(f) The requirements in § 60.2665(b)(2);

(g) Approval of alternative opacity emission limits in § 60.2670 under § 60.11(e)(6) through (8);

(h) Performance test and data reduction waivers under § 60.8(b)(4) and (5); and

(i) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

§ 60.2545 Does this subpart directly affect CISWI owners and operators in my state?

(a) No. This subpart does not directly affect CISWI owners and operators in your state. However, CISWI owners and operators must comply with the state plan you develop to implement the emission guidelines contained in this subpart. States may choose to incorporate the model rule text directly in their state plan.

(b) If you do not submit an approvable plan to implement and enforce the guidelines contained in this subpart for CISWIs that commenced construction before November 30, 1999 by December 2, 2002, EPA will implement and enforce a federal plan, as provided in § 60.2525, to ensure that each unit within your state reaches compliance with all the provisions of this subpart by December 1, 2005.

(c) If you do not submit an approvable plan to implement and enforce the guidelines contained in this subpart by February 7, 2014, for CISWIs that commenced construction on or before June 4, 2010, EPA will implement and enforce a federal plan, as provided in § 60.2525, to ensure that each unit within your state that commenced construction on or before June 4, 2010, reaches compliance with all the provisions of this subpart by February 7, 2018.

Applicability of State Plans

§ 60.2550 What CISWIs must I address in my state plan?

(a) Your state plan must address incineration units that meet all three criteria described in paragraphs (a)(1) through (3) of this section:

(1) Commercial and industrial solid waste incineration units and ACIs in your state that commenced construction on or before June 4, 2010, or commenced modification or

reconstruction after June 4, 2010 but no later than August 7, 2013;

(2) Incineration units that meet the definition of a CISWI as defined in § 60.2875 or an ACI as defined in § 60.2875; and

(3) Incineration units not exempt under § 60.2555.

(b) If the owner or operator of a CISWI or ACI makes changes that meet the definition of modification or reconstruction after August 7, 2013, the CISWI or ACI becomes subject to subpart CCCC of this part and the state plan no longer applies to that unit.

(c) If the owner or operator of a CISWI or ACI makes physical or operational changes to an existing CISWI or ACI primarily to comply with your state plan, subpart CCCC of this part does not apply to that unit. Such changes do not qualify as modifications or reconstructions under subpart CCCC of this part.

§ 60.2555 What combustion units are exempt from my state plan?

This subpart exempts the types of units described in paragraphs (a) through (j) of this section, but some units are required to provide notifications.

(a) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in § 60.2875 are not subject to this subpart if you meet the two requirements specified in paragraphs (a)(1) and (2) of this section:

(1) Notify the Administrator that the unit meets these criteria; and

(2) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(b) *Municipal waste combustion units.* Incineration units that are subject to subpart Ea of this part (Standards of Performance for Municipal Waste Combustors); subpart Eb of this part (Standards of Performance for Large Municipal Waste Combustors); subpart Cb of this part (Emission Guidelines and Compliance Time for Large Municipal Combustors); AAAA of this part (Standards of Performance for Small Municipal Waste Combustion Units); or subpart BBBB of this part (Emission Guidelines for Small Municipal Waste Combustion Units).

(c) *Medical waste incineration units.* Incineration units regulated under subpart Ec of this part (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) or subpart Ca of this part (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators).

(d) *Small power production facilities.* Units that meet the four requirements specified in paragraphs (d)(1) through (4) of this section:

(1) The unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C));

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity;

(3) You submit documentation to the Administrator notifying the Agency that the qualifying small power production facility is combusting homogenous waste; and

(4) You maintain the records specified in § 60.2740(v).

(e) *Cogeneration facilities.* Units that meet the four requirements specified in paragraphs (e)(1) through (4) of this section:

(1) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));

(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes;

(3) You submit documentation to the Administrator notifying the Agency that the qualifying cogeneration facility is combusting homogenous waste; and

(4) You maintain the records specified in § 60.2740(w).

(f) *Hazardous waste combustion units.* Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(g) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters.

(h) *Sewage treatment plants.* Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants).

(i) *Sewage sludge incineration units.* Incineration units combusting sewage sludge for the purpose of reducing the volume of the sewage sludge by removing combustible matter that are subject to subpart LLLL of this part (Standards of Performance for New Sewage Sludge Incineration Units) or subpart MMMM of this part (Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units).

(j) *Other solid waste incineration units.* Incineration units that are subject to subpart EEEE of this part (Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006) or subpart FFFF of this part (Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004).

Use of Model Rule

§ 60.2560 What is the ''model rule'' in this subpart?

(a) The model rule is the portion of these emission guidelines (§§ 60.2575 through 60.2875 of this part) that addresses the regulatory requirements applicable to CISWIs. The model rule provides these requirements in regulation format. You must develop a state plan that is at least as protective as the model rule. You may use the model rule language as part of your state plan. Alternative language may be used in your state plan if you demonstrate that the alternative language is at least as protective as the model rule contained in this subpart.

(b) In the model rule of §§ 60.2575 to 60.2875, ''you'' means the owner or operator of a CISWI.

§ 60.2565 How does the model rule relate to the required elements of my state plan?

Use the model rule to satisfy the state plan requirements specified in § 60.2515(a)(4) and (5) of this part.

§ 60.2570 What are the principal components of the model rule?

The model rule contains the eleven major components listed in paragraphs (a) through (k) of this section:

(a) Increments of progress toward compliance;

(b) Waste management plan;

(c) Operator training and qualification;

(d) Emission limitations and operating limits;

(e) Performance testing;

(f) Initial compliance requirements;

(g) Continuous compliance requirements;

(h) Monitoring;

(i) Recordkeeping and reporting;

(j) Definitions; and

(k) Tables.

Model Rule—Increments of Progress

§ 60.2575 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of state plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section:

(a) Submit a final control plan; and

(b) Achieve final compliance.

§ 60.2580 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

§ 60.2585 What must I include in the notifications of achievement of increments of progress?

Your notification of achievement of increments of progress must include the three items specified in paragraphs (a) through (c) of this section:

(a) Notification that the increment of progress has been achieved;

(b) Any items required to be submitted with each increment of progress; and

(c) Signature of the owner or operator of the CISWI.

§ 60.2590 When must I submit the notifications of achievement of increments of progress?

Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

§ 60.2595 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent calendar month until the increment of progress is met.

§ 60.2600 How do I comply with the increment of progress for submittal of a control plan?

For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section:

(a) Submit the final control plan that includes the five items described in paragraphs (a)(1) through (5) of this section:

(1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limitations and other requirements of this subpart;

(2) The type(s) of waste to be burned;

(3) The maximum design waste burning capacity;

(4) The anticipated maximum charge rate; and

(5) If applicable, the petition for site-specific operating limits under § 60.2680.

(b) Maintain an onsite copy of the final control plan.

§ 60.2605 How do I comply with the increment of progress for achieving final compliance?

For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected CISWI is brought online, all necessary process changes and air pollution control devices would operate as designed.

§ 60.2610 What must I do if I close my CISWI and then restart it?

(a) If you close your CISWI but will restart it prior to the final compliance date in your state plan, you must meet the increments of progress specified in § 60.2575.

(b) If you close your CISWI but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations and operating limits on the date your unit restarts operation.

§ 60.2615 What must I do if I plan to permanently close my CISWI and not restart it?

If you plan to close your CISWI rather than comply with the state plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

Model Rule—Waste Management Plan

§ 60.2620 What is a waste management plan?

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

§ 60.2625 When must I submit my waste management plan?

You must submit a waste management plan no later than the date specified in table 1 of this subpart for submittal of the final control plan.

§ 60.2630 What should I include in my waste management plan?

A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures, and the source must implement those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have.

Model Rule—Operator Training and Qualification

§ 60.2635 What are the operator training and qualification requirements?

(a) No CISWI can be operated unless a fully trained and qualified CISWI operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI operator may operate the CISWI directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI operators are temporarily not accessible, you must follow the procedures in § 60.2665.

(b) Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in paragraph (c) of this section.

(c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section:

(1) Training on the eleven subjects listed in paragraphs (c)(1)(i) through (xi) of this section:

(i) Environmental concerns, including types of emissions;

(ii) Basic combustion principles, including products of combustion;

(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

(iv) Combustion controls and monitoring;

(v) Operation of air pollution control equipment and factors affecting performance (if applicable);

(vi) Inspection and maintenance of the incinerator and air pollution control devices;

(vii) Actions to prevent and correct malfunctions or to prevent conditions that may lead to malfunctions;

(viii) Bottom and fly ash characteristics and handling procedures;

(ix) Applicable federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards;

(x) Pollution prevention; and

(xi) Waste management practices.

(2) An examination designed and administered by the instructor.

(3) Written material covering the training course topics that can serve as reference material following completion of the course.

§ 60.2640 When must the operator training course be completed?

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of this section:

(a) The final compliance date (Increment 2);

(b) Six months after CISWI startup; and

(c) Six months after an employee assumes responsibility for operating the CISWI or assumes responsibility for supervising the operation of the CISWI.

§ 60.2645 How do I obtain my operator qualification?

(a) You must obtain operator qualification by completing a training course that satisfies the criteria under § 60.2635(b).

(b) Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under § 60.2635(c)(2).

§ 60.2650 How do I maintain my operator qualification?

To maintain qualification, you must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs (a) through (e) of this section:

(a) Update of regulations;

(b) Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling;

(c) Inspection and maintenance;

(d) Prevention and correction of malfunctions or conditions that may lead to malfunction; and

(e) Discussion of operating problems encountered by attendees.

§ 60.2655 How do I renew my lapsed operator qualification?

You must renew a lapsed operator qualification by one of the two methods specified in paragraphs (a) and (b) of this section:

(a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in § 60.2650; and

(b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in § 60.2645(a).

§ 60.2660 What site-specific documentation is required?

(a) Documentation must be available at the facility and readily accessible for all CISWI operators that addresses the ten topics described in paragraphs (a)(1) through (10) of this section. You must maintain this information and the training records required by paragraph (c) of this section in a manner that they can be readily accessed and are suitable for inspection upon request:

(1) Summary of the applicable standards under this subpart;

(2) Procedures for receiving, handling, and charging waste;

(3) Incinerator startup, shutdown, and malfunction procedures;

(4) Procedures for maintaining proper combustion air supply levels;

(5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart;

(6) Monitoring procedures for demonstrating compliance with the incinerator operating limits;

(7) Reporting and recordkeeping procedures;

(8) The waste management plan required under §§ 60.2620 through 60.2630;

(9) Procedures for handling ash; and

(10) A list of the wastes burned during the performance test.

(b) You must establish a program for reviewing the information listed in paragraph (a) of this section with each incinerator operator:

(1) The initial review of the information listed in paragraph (a) of this section must be conducted by the later of the three dates specified in paragraphs (b)(1)(i) through (iii) of this section:

(i) The final compliance date (Increment 2);

(ii) Six months after CISWI startup; and

(iii) Six months after being assigned to operate the CISWI.

(2) Subsequent annual reviews of the information listed in paragraph (a) of this section must be conducted no later than 12 months following the previous review.

(c) You must also maintain the information specified in paragraphs (c)(1) through (3) of this section:

(1) Records showing the names of CISWI operators who have completed review of the information in § 60.2660(a) as required by § 60.2660(b), including the date of the initial review and all subsequent annual reviews;

(2) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 60.2655. Records must include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications; and

(3) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.

§ 60.2665 What if all the qualified operators are temporarily not accessible?

If all qualified operators are temporarily not accessible (*i.e.,* not at the facility and not able to be at the facility within 1 hour), you must meet one of the two criteria specified in paragraphs (a) and (b) of this section, depending on the length of time that a qualified operator is not accessible:

(a) When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI may be operated by other plant personnel familiar with the operation of the CISWI who have completed a review of the information specified in § 60.2660(a) within the past 12 months. However, you must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under § 60.2770;

(b) When all qualified operators are not accessible for 2 weeks or more, you must take the two actions that are described in paragraphs (b)(1) and (2) of this section:

(1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible; and

(2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under paragraph (b)(1) of this section. If the Administrator notifies you that your request to continue operation of the CISWI is disapproved, the CISWI may continue operation for 90 days, then must cease operation. Operation of the unit may resume if you meet the two requirements in paragraphs (b)(2)(i) and (ii) of this section:

(i) A qualified operator is accessible as required under § 60.2635(a); and

(ii) You notify the Administrator that a qualified operator is accessible and that you are resuming operation.

Model Rule—Emission Limitations and Operating Limits

§ 60.2670 What emission limitations must I meet and by when?

(a) You must meet the emission limitations for each CISWI, including bypass stack or vent, specified in table 2 of this subpart or tables 6 through 9 of this subpart by the final compliance date under the approved state plan, federal plan, or delegation, as applicable. The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction.

(b) Units that do not use wet scrubbers must maintain opacity to less than or equal to the percent opacity (three 1-hour blocks consisting of ten 6-minute average opacity values) specified in table 2 of this subpart, as applicable.

§ 60.2675 What operating limits must I meet and by when?

(a) If you use a wet scrubber(s) to comply with the emission limitations, you must establish operating limits for up to four operating parameters (as specified in table 3 of this subpart) as described in paragraphs (a)(1) through (4) of this section during the initial performance test:

(1) Maximum charge rate, calculated using one of the two different procedures in paragraph (a)(1)(i) or (ii) of this section, as appropriate:

(i) For continuous and intermittent units, maximum charge rate is 110 percent of the average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations; and

(ii) For batch units, maximum charge rate is 110 percent of the daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(2) Minimum pressure drop across the wet particulate matter scrubber, which is calculated as the lowest 1-hour average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or minimum amperage to the wet scrubber, which is calculated as the lowest 1-hour average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(3) Minimum scrubber liquid flow rate, which is calculated as the lowest 1-hour average liquid flow rate at the inlet to the wet acid gas or particulate matter scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(4) Minimum scrubber liquor pH, which is calculated as the lowest 1-hour average liquor pH at the inlet to the wet acid gas scrubber measured during the most recent performance test demonstrating compliance with the hydrogen chloride (HCl) emission limitation.

(b) You must meet the operating limits established on the date that the performance test report is submitted to the EPA's Central Data Exchange or postmarked, per the requirements of § 60.2795(b).

(c) If you use a fabric filter to comply with the emission limitations and you do not use a particulate matter (PM) continuous parameter monitoring system (CPMS) for monitoring PM compliance, you must operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.

(d) If you use an electrostatic precipitator to comply with the emission limitations and you do not use a PM CPMS for monitoring PM compliance, you must measure the (secondary) voltage and amperage of the electrostatic precipitator collection plates during the particulate matter performance test. Calculate the average electric power value (secondary voltage × secondary current = secondary electric power) for each test run. The operating limit for the electrostatic precipitator is calculated as the lowest 1-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(e) If you use activated carbon sorbent injection to comply with the emission limitations, you must measure the sorbent flow rate during the performance testing. The operating limit for the carbon sorbent injection is calculated as the lowest 1-hour average sorbent flow rate measured during the most recent performance test demonstrating compliance with the mercury emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (*e.g.,* for 50 percent load, multiply the injection rate operating limit by 0.5).

(f) If you use selective noncatalytic reduction to comply with the emission limitations, you must measure the charge rate, the secondary chamber temperature (if applicable to your CISWI), and the reagent flow rate during the nitrogen oxides performance testing. The operating limits for the selective noncatalytic reduction are calculated as the highest 1-hour average charge rate, lowest secondary chamber temperature, and lowest reagent flow rate measured during the most recent performance test demonstrating compliance with the nitrogen oxides emission limitations.

(g) If you use a dry scrubber to comply with the emission limitations, you must measure the injection rate of each sorbent during the performance testing. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate of each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (*e.g.,* for 50 percent load, multiply the injection rate operating limit by 0.5).

(h) If you do not use a wet scrubber, electrostatic precipitator, or fabric filter to comply with the emission limitations, and if you do not determine compliance with your particulate matter emission limitation with either a particulate matter CEMS or a particulate matter CPMS, you must maintain opacity to less than or equal to ten percent opacity (1-hour block average).

(i) If you use a PM CPMS to demonstrate compliance, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of this section:

(1) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record all hourly average output values (milliamps, or the digital signal equivalent) from the PM CPMS for the periods corresponding to the test runs (*e.g.,* three 1-hour average PM CPMS output values for three 1-hour test runs):

(i) Your PM CPMS must provide a 4–20 milliamp output, or the digital signal equivalent, and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps or digital bits;

(ii) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit; and

(iii) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values, or their digital equivalent, from the PM CPMS for the periods corresponding to the compliance test runs (*e.g.,* average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(2) If the average of your three PM performance test runs are below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS output values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in (i)(1)through (5) of this section:

(i) Determine your instrument zero output with one of the following procedures:

(A) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench;

(B) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air;

(C) The zero point can also can be established obtained by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (*e.g.,* when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept; and

(D) If none of the steps in paragraphs (i)(2)(i)(A) through (C) of this section are possible, you must use a zero output value provided by the manufacturer.

(ii) Determine your PM CPMS instrument average in milliamps, or the digital equivalent, and the average of your corresponding three PM compliance test runs, using equation 1:

$$\overline{x} = \frac{1}{n}\sum_{i=1}^{n} X_1, \overline{y} = \frac{1}{n}\sum_{i=1}^{n} Y_1 \quad \text{(Eq. 1)}$$

Where:

X_1 = the PM CPMS output data points for the three runs constituting the performance test,

Y_1 = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

(iii) With your instrument zero expressed in milliamps, or the digital equivalent, your three run average PM CPMS milliamp value, or its digital equivalent, and your three run average PM concentration from your three compliance tests, determine a relationship of mg/dscm per milliamp or digital signal equivalent, with equation 2:

$$R = \left(\frac{Y_1}{X_{1-z}}\right) \quad \text{(Eq. 2)}$$

Where:

R = the relative mg/dscm per milliamp, or the digital equivalent, for your PM CPMS,

Y_1 = the three run average mg/dscm PM concentration,

X_1 = the three run average milliamp output, or the digital equivalent, from you PM CPMS, and

z = the milliamp or digital signal equivalent of your instrument zero determined from paragraph (i)(2)(i) of this section.

(iv) Determine your source specific 30-day rolling average operating limit using the mg/dscm per milliamp value, or per digital signal equivalent, from equation 2 in equation 3, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit:

$$O_l = z + \frac{0.75(L)}{R} \quad \text{(Eq. 3)}$$

Where:

O_l = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps or their digital signal equivalent,

L = your source emission limit expressed in mg/dscm,

z = your instrument zero in milliamps or digital equivalent, determined from paragraph (i)(2)(i) of this section, and
R = the relative mg/dscm per milliamp, or per digital signal output equivalent, for your PM CPMS, from equation 2.

(3) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp or digital signal output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 4 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of this section:

$$O_n = \frac{1}{n}\sum_{i=1}^{n} X_1 \qquad \text{(Eq. 4)}$$

Where:
X_1 = the PM CPMS data points for all runs i,
n = the number of data points, and
O_h = your site specific operating limit, in milliamps or digital signal equivalent.

(4) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (*e.g.,* milliamps or digital signal bits, PM concentration, raw data signal) on a 30-day rolling average basis.

(5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.,* beta attenuation), span of the instruments primary analytical range, milliamp or digital signal value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital signals corresponding to each PM compliance test run.

§ 60.2680 What if I do not use a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations?

(a) If you use an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber or limit emissions in some other manner, including mass balances, to comply with the emission limitations under § 60.2670, you must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must submit the petition at least sixty days before the performance test is scheduled to begin. Your petition must include the five items listed in paragraphs (a)(1) through (5) of this section:

(1) Identification of the specific parameters you propose to use as additional operating limits;

(2) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters and how limits on these parameters will serve to limit emissions of regulated pollutants;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(b) [Reserved]

Model Rule—Performance Testing

§ 60.2690 How do I conduct the initial and annual performance test?

(a) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.

(b) You must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in § 60.2740(b)(1)) and the types of waste burned during the performance test.

(c) All performance tests must be conducted using the minimum run duration specified in tables 2 and 6 through 9 of this subpart.

(d) Method 1 of appendix A of this part must be used to select the sampling location and number of traverse points.

(e) Method 3A or 3B of appendix A of this part must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B of appendix A of this part must be used simultaneously with each method (except when using Method 9 and Method 22).

(f) All pollutant concentrations, except for opacity, must be adjusted to 7 percent oxygen using equation 5 of this section:

$$C_{adj} = C_{meas}\,(20.9-7)/(20.9-\%O_2) \qquad \text{(Eq. 5)}$$

Where:
C_{adj} = pollutant concentration adjusted to 7 percent oxygen;
C_{meas} = pollutant concentration measured on a dry basis;
(20.9 − 7) = 20.9 percent oxygen − 7 percent oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(g) You must determine dioxins/furans toxic equivalency by following the procedures in paragraphs (g)(1) through (4) of this section:

(1) Measure the concentration of each dioxin/furan tetra- through octa-isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A;

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. [Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.];

(3) For each dioxin/furan (tetra- through octa-chlorinated) isomer measured in accordance with paragraph (g)(1) and (2) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in table 4 of this subpart; and

(4) Sum the products calculated in accordance with paragraph (g)(3) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

(h) Method 22 at 40 CFR part 60, appendix A–7 must be used to determine compliance with the fugitive ash emission limit in table 2 of this subpart or tables 6 through 9 of this subpart.

(i) If you have an applicable opacity operating limit, you must determine compliance with the opacity limit using Method 9 at 40 CFR part 60, appendix A–4, based on three 1-hour blocks consisting of ten 6-minute average opacity values, unless you are required to install a continuous opacity monitoring system, consistent with § 60.2710 and § 60.2730.

(j) You must determine dioxins/furans total mass basis by following the procedures in paragraphs (j)(1) through (3) of this section:

(1) Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A–7;

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.); and

(3) Sum the quantities measured in accordance with paragraphs (j)(1) and (2) of this section to obtain the total concentration of dioxins/furans emitted in terms of total mass basis.

§ 60.2695 How are the performance test data used?

You use results of performance tests to demonstrate compliance with the emission limitations in table 2 of this subpart or tables 6 through 9 of this subpart.

Model Rule—Initial Compliance Requirements

§ 60.2700 How do I demonstrate initial compliance with the amended emission limitations and establish the operating limits?

(a) You must conduct a performance test, as required under §§ 60.2670 and 60.2690, to determine compliance with the emission limitations in table 2 of this subpart and tables 6 through 9 of this subpart, to establish compliance with any opacity operating limits in § 60.2675, to establish the kiln-specific emission limit in § 60.2710(y), as applicable, and to establish operating limits using the procedures in § 60.2675 or § 60.2680. The performance test must be conducted using the test methods listed in table 2 of this subpart and tables 6 through 9 of this subpart and the procedures in § 60.2690. The use of the bypass stack during a performance test shall invalidate the performance test.

(b) As an alternative to conducting a performance test, as required under §§ 60.2690 and 60.2670, you may use a 30-day rolling average of the 1-hour arithmetic average CEMS data, including CEMS data during startup and shutdown as defined in this subpart, to determine compliance with the emission limitations in Table 1 of this subpart or Tables 5 through 8 of this subpart. You must conduct a performance evaluation of each continuous monitoring system within 180 days of installation of the monitoring system. The initial performance evaluation must be conducted prior to collecting CEMS data that will be used for the initial compliance demonstration.

§ 60.2705 By what date must I conduct the initial performance test?

(a) The initial performance test must be conducted no later than 180 days after your final compliance date. Your final compliance date is specified in table 1 of this subpart.

(b) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you conducted a test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you do not need to retest until 6 months from the date you reintroduce that solid waste.

(c) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you have not conducted a performance test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you must conduct a performance test within 60 days from the date you reintroduce solid waste.

§ 60.2706 By what date must I conduct the initial air pollution control device inspection?

(a) The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI reaches the charge rate at which it will operate, but no later than 180 days after the final compliance date for meeting the amended emission limitations.

(b) Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed.

Model Rule—Continuous Compliance Requirements

§ 60.2710 How do I demonstrate continuous compliance with the amended emission limitations and the operating limits?

(a) General compliance with standards, considering some units may be able to switch between solid waste and non-waste fuel combustion, is specified in paragraph (a)(1) through (6) of this section.

(1) The emission standards and operating requirements set forth in this subpart apply at all times.

(2) If you cease combusting solid waste you may opt to remain subject to the provisions of this subpart. Consistent with the definition of CISWI, you are subject to the requirements of this subpart at least 6 months following the last date of solid waste combustion. Solid waste combustion is ceased when solid waste is not in the combustion

chamber (*i.e.,* the solid waste feed to the combustor has been cut off for a period of time not less than the solid waste residence time).

(3) If you cease combusting solid waste you must be in compliance with any newly applicable standards on the effective date of the waste-to-fuel switch. The effective date of the waste-to-fuel switch is a date selected by you, that must be at least 6 months from the date that you ceased combusting solid waste, consistent with § 60.2710(a)(2). Your source must remain in compliance with this subpart until the effective date of the waste-to-fuel switch.

(4) If you own or operate an existing commercial or industrial combustion unit that combusted a fuel or non-waste material, and you commence or recommence combustion of solid waste, you are subject to the provisions of this subpart as of the first day you introduce or reintroduce solid waste to the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch. You must complete all initial compliance demonstrations for any Section 112 standards that are applicable to your facility before you commence or recommence combustion of solid waste. You must provide 30 days prior notice of the effective date of the waste-to-fuel switch. The notification must identify:

(i) The name of the owner or operator of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;

(ii) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(iii) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(iv) The date on which you became subject to the currently applicable emission limits;

(v) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (*i.e.,* the effective date of the waste-to-fuel switch), consistent with paragraphs (a)(2) and (3) of this section.

(5) All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch.

(6) All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy tests must be performed as of the performance test deadline for PM CEMS (if PM CEMS are elected to demonstrate continuous compliance with the particulate matter emission limits). Relative accuracy testing for other CEMS need not be repeated if that testing was previously performed consistent with section 112 monitoring requirements or monitoring requirements under this subpart.

(b) You must conduct an annual performance test for the pollutants listed in table 2 of this subpart or tables 6 through 9 of this subpart and opacity for each CISWI as required under § 60.2690. The annual performance test must be conducted using the test methods listed in table 2 of this subpart or tables 6 through 9 of this subpart and the procedures in § 60.2690. Opacity must be measured using EPA Reference Method 9 at 40 CFR part 60. Annual performance tests are not required if you use CEMS or continuous opacity monitoring systems to determine compliance.

(c) You must continuously monitor the operating parameters specified in § 60.2675 or established under § 60.2680 and as specified in § 60.2735. Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour block average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under § 60.2680 or, for energy recovery units, where the averaging time for each operating parameter is a 30-day rolling, calculated each hour as the average of the previous 720 operating hours. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

(d) You must burn only the same types of waste and fuels used to establish subcategory applicability (for ERUs) and operating limits during the performance test.

(e) For energy recovery units, incinerators, and small remote units, you must perform annual visual emissions test for ash handling.

(f) For energy recovery units, you must conduct an annual performance test for opacity using EPA Reference Method 9 at 40 CFR part 60 (except where particulate matter continuous monitoring system or CPMS are used) and the pollutants listed in table 7 of this subpart.

(g) For facilities using a CEMS to demonstrate compliance with the carbon monoxide emission limit, compliance with the carbon monoxide emission limit may be demonstrated by using the CEMS, as described in § 60.2730(o).

(h) Coal and liquid/gas energy recovery units with annual average heat input rates greater than 250 MMBtu/hr may elect to demonstrate continuous compliance with the particulate matter emissions limit using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of the CPMS specified in § 60.2710(i). Coal and liquid/gas energy recovery units with annual average heat input rates less than 250 MMBtu/hr, incinerators, and small remote incinerators may also elect to demonstrate compliance using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of particulate matter testing with EPA Method 5 at 40 CFR part 60, appendix A–3 and, if applicable, the continuous opacity monitoring requirements in paragraph (i) of this section.

(i) For energy recovery units with annual average heat input rates greater than or equal to 10 MMBtu/hr but less than 250 MMBtu/hr that do not use a wet scrubber, fabric filter with bag leak detection system, an electrostatic precipitator, particulate matter CEMS, or particulate matter CPMS, you must install, operate, certify and maintain a continuous opacity monitoring system (COMS) according to the procedures in § 60.2730(m).

(j) For waste-burning kilns, you must conduct an annual performance test for the pollutants (except mercury and particulate matter, and hydrogen chloride if no acid gas wet scrubber or dry scrubber is used) listed in table 8 of this subpart, unless you choose to demonstrate initial and continuous compliance using CEMS, as allowed in

paragraph (u) of this section. If you do not use an acid gas wet scrubber or dry scrubber, you must determine compliance with the hydrogen chloride emissions limit using a HCl CEMS according to the requirements in paragraph (j)(1) of this section. You must determine compliance with the mercury emissions limit using a mercury CEMS or an integrated sorbent trap monitoring system according to paragraph (j)(2) of this section. You must determine compliance with particulate matter using CPMS.

(1) If you monitor compliance with the HCl emissions limit by operating an HCl CEMS, you must do so in accordance with Performance Specification 15 (PS 15) of appendix B to 40 CFR part 60, or, PS 18 of appendix B to 40 CFR part 60. You must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR part 60 except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. You must operate, maintain and quality assure a HCl CEMS installed and certified under PS 18 according to the quality assurance requirements in Procedure 6 of appendix F to 40 CFR part 60. For any performance specification that you use, you must use Method 321 of appendix A to 40 CFR part 63 as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (j)(1)(i) and (ii) of this section apply to all HCl CEMS used under this subpart:

(i) You must use a measurement span value for any HCl CEMS of 0–10 ppmvw unless the monitor is installed on a kiln without an inline raw mill. Kilns without an inline raw mill may use a higher span value sufficient to quantify all expected emissions concentrations. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during ''mill off'' conditions. The corresponding data recorder range shall be documented in the site-specific monitoring plan and associated records; and

(ii) In order to quality assure data measured above the span value, you must use one of the three options in paragraphs (j)(1)(ii)(A) through (C) of this section:

(A) Include a second span that encompasses the HCl emission concentrations expected to be encountered during ''mill off'' conditions. This second span may be rounded to a multiple of 5 ppm of total HCl. The requirements of the appropriate HCl monitor performance specification shall be followed for this second span with the exception that a RATA with the mill off is not required;

(B) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (j)(1)(i) of this section using the following procedure. Conduct a weekly ''above span linearity'' calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75% of the highest measured hourly concentration. The ''above span'' reference gas must meet the requirements of the applicable performance specification and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The ''above span linearity'' challenge is successful if the value measured by the HCl CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the HCl CEMS during the above span linearity challenge exceeds 10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new ''above span linearity'' challenge met before returning the HCl CEMS to service, or data above span from the HCl CEMS must be subject to the quality assurance procedures established in (j)(1)(ii)(D) of this section. In this manner values measured by the HCl CEMS during the above span linearity challenge exceeding +/-20 percent of the certified value of the reference gas must be normalized using equation 6;

(C) Quality assure any data above the span value established in paragraph (j)(1)(i) of this section using the following procedure. Any time two consecutive one-hour average measured concentration of HCl exceeds the span value you must, within 24 hours before or after, introduce a higher, ''above span'' HCl reference gas standard to the HCl CEMS. The ''above span'' reference gas must meet the requirements of the applicable performance specification and target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include above span calibrations done before or after the above-span measurement period. Record and report the results of this procedure as you would for a daily calibration. The ''above span'' calibration is successful if the value measured by the HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then you must normalize the stack gas values measured above span as described in paragraph (j)(1)(ii)(D) of this section. If the ''above span'' calibration is conducted during the period when measured emissions are above span and there is a failure to collect the one data point in an hour due to the calibration duration, then you must determine the emissions average for that missed hour as the average of hourly averages for the hour preceding the missed hour and the hour following the missed hour. In an hour where an ''above span'' calibration is being conducted and one or more data points are collected, the emissions average is represented by the average of all valid data points collected in that hour; and

(D) In the event that the ''above span'' calibration is not successful (*i.e.,* the HCl CEMS measured value is not within 20 percent of the certified value of the reference gas), then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the ''above span'' calibration for reporting based on the HCl CEMS response to the reference gas as shown in equation 6:

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} = \text{Measured stack gas} = \text{Normalized stack gas result} \quad \text{(Eq. 6)}$$

Only one ''above span'' calibration is needed per 24-hour period.

(2) Compliance with the mercury emissions limit must be determined using a mercury CEMS or integrated sorbent trap monitoring system according to the following requirements:

(i) You must operate a mercury CEMS in accordance with performance specification 12A at 40 CFR part 60, appendix B or an integrated sorbent trap monitoring system in accordance with performance specification 12B at 40 CFR part 60, appendix B; these monitoring systems must be quality assured according to procedure 5 of 40 CFR 60, appendix F. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. If you choose to comply with the production-rate based mercury limit for your waste-burning kiln, you must also monitor hourly clinker production and determine the hourly mercury emissions rate in pounds per million ton of clinker produced. You must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations or mass emissions rates, including CEMS data during startup and shutdown as defined in this subpart, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7 of this part. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content;

(ii) Owners or operators using a mercury CEMS or integrated sorbent trap monitoring system to determine mass emission rate must install, operate, calibrate and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specification 6 at 40 CFR part 60, appendix B and conducting an annual relative accuracy test of the continuous emission rate monitoring system according to section 8.2 of performance specification 6; and

(iii) The owner or operator of a waste-burning kiln must demonstrate initial compliance by operating a mercury CEMS or integrated sorbent trap monitoring system while the raw mill of the in-line kiln/raw mill is operating under normal conditions and including at least one period when the raw mill is off.

(k) If you use an air pollution control device to meet the emission limitations in this subpart, you must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:

(1) Inspect air pollution control device(s) for proper operation; and

(2) Develop a site-specific monitoring plan according to the requirements in paragraph (l) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 60.13(i).

(l) For each CMS required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of this paragraph (l) that addresses paragraphs (l)(1)(i) through (vi) of this section:

(1) You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your continuous monitoring system:

(i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems;

(iii) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of § 60.11(d);

(v) Ongoing data quality assurance procedures in accordance with the general requirements of § 60.13; and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 60.7(b), (c) introductory text, (c)(1) and (4), and (d) through (g).

(2) You must conduct a performance evaluation of each continuous monitoring system in accordance with your site-specific monitoring plan.

(3) You must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.

(m) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (l) and (m)(1) through (4) of this section:

(1) Install the flow sensor and other necessary equipment in a position that provides a representative flow;

(2) Use a flow sensor with a measurement sensitivity at full scale of no greater than 2 percent;

(3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; and

(4) Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(n) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (l) and (n)(1) through (6) of this section:

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.,* PM scrubber pressure drop);

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion;

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less;

(4) Perform checks at the frequency outlined in your site-specific monitoring plan to ensure pressure measurements are not obstructed (*e.g.,* check for pressure tap plugging daily);

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually; and

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(o) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (l) and (o)(1) through (4) of this section:

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH;

(2) Ensure the sample is properly mixed and representative of the fluid to be measured;

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day; and

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(p) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator, you must meet the requirements in paragraphs (l) and (p)(1) and (2) of this section:

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates; and

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(q) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (*e.g.,* weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (l) and (q)(1) and (2) of this section:

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate; and

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(r) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (l) and (r)(1) through (5) of this section:

(1) Install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.,* for a positive pressure fabric filter) of the fabric filter;

(2) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less;

(3) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA–454/R–98–015 (incorporated by reference, *see* § 60.17);

(4) Use a bag leak detection system equipped with a device to continuously record the output signal from the sensor; and

(5) Use a bag leak detection system equipped with a system that will sound an alarm when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is observed readily by plant operating personnel.

(s) For facilities using a CEMS to demonstrate initial and continuous compliance with the sulfur dioxide emission limit, compliance with the sulfur dioxide emission limit may be demonstrated by using the CEMS specified in § 60.2730(l) to measure sulfur dioxide. The sulfur dioxide CEMS must follow the procedures and methods specified in paragraph (s) of this section. For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide CEMS should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the CEMS, whichever is greater:

(1) During each relative accuracy test run of the CEMS required by performance specification 2 in appendix B of this part, collect sulfur dioxide and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (s)(1)(i) and (ii) of this section:

(i) For sulfur dioxide, EPA Reference Method 6 or 6C, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, see § 60.17) must be used; and

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, see § 60.17), as applicable, must be used.

(2) The span value of the CEMS at the inlet to the sulfur dioxide control device must be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this subpart. The span value of the CEMS at the outlet of the sulfur dioxide control device must be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this subpart.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(t) For facilities using a CEMS to demonstrate initial and continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in § 60.2730 to measure nitrogen oxides. The nitrogen oxides CEMS must follow the procedures and methods specified in paragraphs (t)(1) through (4) of this section:

(1) During each relative accuracy test run of the CEMS required by performance specification 2 of appendix B of this part, collect nitrogen oxides and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (t)(1)(i) and (ii) of this section:

(i) For nitrogen oxides, EPA Reference Method 7 or 7E at 40 CFR part 60, appendix A–4 must be used; and

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, see § 60.17), as applicable, must be used.

(2) The span value of the CEMS must be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of unit.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(4) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified in paragraphs (t)(4)(i) through (iv) of this section. This relationship may be reestablished during performance compliance tests:

(i) The fuel factor equation in Method 3B must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A, 3B, or as an alternative ANSI/ASME PTC 19.10–1981 (incorporated by reference, see § 60.17), as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor;

(ii) Samples must be taken for at least 30 minutes in each hour;

(iii) Each sample must represent a 1-hour average; and

(iv) A minimum of 3 runs must be performed.

(u) For facilities using a CEMS or an integrated sorbent trap monitoring system for mercury to demonstrate initial and continuous compliance with any of the emission limits of this subpart, you must complete the following:

(1) Demonstrate compliance with the appropriate emission limit(s) using a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS or an integrated

sorbent trap monitoring system data during startup and shutdown, as defined in this subpart, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at appendix A–7 of this part. The 1-hour arithmetic averages for CEMS must be calculated using the data points required under § 60.13(e)(2). Except for CEMS or an integrated sorbent trap monitoring system data during startup and shutdown, the 1-hour arithmetic averages used to calculate the 30-day rolling average emission concentrations must be corrected to 7 percent oxygen (dry basis). Integrated sorbent trap monitoring system or CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content; and

(2) Operate all CEMS and integrated sorbent trap monitoring systems in accordance with the applicable procedures under appendices B and F of this part.

(v) Use of the bypass stack at any time is an emissions standards deviation for PM, HCl, lead, cadmium, mercury, nitrogen oxides, sulfur dioxide, and dioxin/furans.

(w) For energy recovery units with a design heat input capacity of 100 MMBtu/hr or greater that do not use a carbon monoxide CEMS, you must install, operate, and maintain an oxygen analyzer system as defined in § 60.2875 according to the procedures in paragraphs (w)(1) through (4) of this section:

(1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2675;

(2) You must operate the oxygen trim system within compliance with paragraph (w)(3) of this section at all times;

(3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test; and

(4) You must calculate and record a 30-day rolling average oxygen concentration using equation 19–19 in section 12.4.1 of EPA Reference Method 19 of Appendix A–7 of this part.

(x) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hr and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (x)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure):

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with paragraphs (l) and (x)(1)(i) through (iii) of this section:

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps or the digital signal equivalent;

(ii) The PM CPMS must have a cycle time (*i.e.,* period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes; and

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations increments no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2675.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps or the digital signal equivalent.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps or their digital equivalent).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (x)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value;

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit. Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under paragraph (x) of this section; and

(iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

(y) When there is an alkali bypass and/or an in-line coal mill that exhaust emissions through a separate stack(s), the combined emissions are subject to the emission limits applicable to waste-burning kilns. To determine the kiln-specific emission limit for demonstrating compliance, you must:

(1) Calculate a kiln-specific emission limit using equation 7:

$$C_{ks} = ((\text{Emission limit} \times (Q_{ab}+Q_{cm}+Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm}))/Q_{ks} \quad \text{(Eq. 7)}$$

Where:

C_{ks} = Kiln stack concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{ab} = Alkali bypass flow rate (volume/hr)
C_{ab} = Alkali bypass concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{cm} = In-line coal mill flow rate (volume/hr)
C_{cm} = In-line coal mill concentration (ppmvd, mg/dscm, ng/dscm, depending on pollutant. Each corrected to 7% O_2.)
Q_{ks} = Kiln stack flow rate (volume/hr)

(2) Particulate matter concentration must be measured downstream of the in-line coal mill. All other pollutant concentrations must be measured either upstream or downstream of the in-line coal mill.

(3) For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS or PM CPMS on the alkali bypass stack or in-line coal mill stack, the results of the initial and subsequent performance test can be used to demonstrate compliance with the relevant emissions limit. A performance test must be conducted on an annual basis (between 11 and 13 calendar months following the previous performance test).

§ 60.2715 By what date must I conduct the annual performance test?

You must conduct annual performance tests between 11 and 13 calendar months of the previous performance test.

§ 60.2716 By what date must I conduct the annual air pollution control device inspection?

On an annual basis (no more than 12 months following the previous annual air pollution control device inspection), you must complete the air pollution control device inspection as described in § 60.2706.

§ 60.2720 May I conduct performance testing less often?

(a) You must conduct annual performance tests according to the schedule specified in § 60.2715, with the following exceptions:

(1) You may conduct a repeat performance test at any time to establish new values for the operating limits, as specified in § 60.2725. New operating limits become effective on the date that the performance test report is submitted to the EPA's Central Data Exchange or postmarked, per the requirements of § 60.2795(b). The Administrator may request a repeat performance test at any time;

(2) You must repeat the performance test within 60 days of a process change, as defined in § 60.2875; and

(3) You can conduct performance tests less often if you meet the following conditions: Your performance tests for the pollutant for at least 2 consecutive performance tests demonstrates that the emission level for the pollutant is no greater than the emission level specified in paragraph (a)(3)(i) or (ii) of this section, as applicable; there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions; and you are not required to conduct a performance test for the pollutant in response to a request by the Administrator in paragraph (a)(1) of this section or a process change in paragraph (a)(2) of this section. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test for the pollutant no more than 37 months following the previous performance test for the pollutant. If the emission level for your CISWI continues to meet the emission level specified in paragraph (a)(3)(i) or (ii) of this section, as applicable, you may choose to conduct performance tests for the pollutant every third year, as long as there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. Each such performance test must be conducted no more than 37 months after the previous performance test.

(i) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit in table 2 or tables 6 through 9 of this subpart, as applicable; and

(ii) For fugitive emissions, visible emissions (of combustion ash from the ash conveying system) for 2 percent of the time during each of the three 1-hour observation periods.

(4) If you are conducting less frequent testing for a pollutant as provided in paragraph (a)(3) of this section and a subsequent performance test for the pollutant indicates that your CISWI does not meet the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of this section, as applicable, you must conduct annual performance tests for the pollutant according to the schedule specified in paragraph (a) of this section until you qualify for less frequent testing for the pollutant as specified in paragraph (a)(3) of this section.

(b) [Reserved]

§ 60.2725 May I conduct a repeat performance test to establish new operating limits?

(a) Yes. You may conduct a repeat performance test at any time to establish new values for the operating limits. The Administrator may request a repeat performance test at any time.

(b) You must repeat the performance test if your feed stream is different than the feed streams used during any performance test used to demonstrate compliance.

Model Rule—Monitoring

§ 60.2730 What monitoring equipment must I install and what parameters must I monitor?

(a) If you are using a wet scrubber to comply with the emission limitation under § 60.2670, you must install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the value of the operating parameters used to determine compliance with the operating limits listed in table 3 of this subpart. These devices (or methods) must measure and record the values for these operating parameters at the frequencies indicated in table 3 of this subpart at all times except as specified in § 60.2735(a).

(b) If you use a fabric filter to comply with the requirements of this subpart and you do not use a PM CPMS or PM CEMS for monitoring PM compliance,

you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (b)(1) through (8) of this section:

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations;

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less;

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

(6) The bag leak detection system must be equipped with an alarm system that will alert automatically an operator when an increase in relative particulate matter emission over a preset level is detected. The alarm must be located where it is observed easily by plant operating personnel;

(7) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter; and

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(c) If you are using something other than a wet scrubber, activated carbon, selective non-catalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations under § 60.2670, you must install, calibrate (to the manufacturers' specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established using the procedures in § 60.2680.

(d) If you use activated carbon injection to comply with the emission limitations in this subpart, you must measure the minimum sorbent flow rate once per hour.

(e) If you use selective noncatalytic reduction to comply with the emission limitations, you must complete the following:

(1) Following the date on which the initial performance test is completed or is required to be completed under § 60.2690, whichever date comes first, ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature (if applicable to your CISWI) or the minimum reagent flow rate measured as 3-hour block averages at all times; and

(2) Operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum reagent flow rate simultaneously constitute a violation of the nitrogen oxides emissions limit.

(f) If you use an electrostatic precipitator to comply with the emission limits of this subpart and you do not use a PM CPMS for monitoring PM compliance, you must monitor the secondary power to the electrostatic precipitator collection plates and maintain the 3-hour block averages at or above the operating limits established during the mercury or particulate matter performance test.

(g) For waste-burning kilns not equipped with a wet scrubber or dry scrubber, you must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions discharged to the atmosphere, as specified in § 60.2710(j), and record the output of the system. You may substitute use of a HCl CEMS for conducting the HCl initial and annual testing with EPA Method 321 at 40 CFR part 63, appendix A. For units other than waste-burning kilns not equipped with a wet scrubber or dry scrubber, a facility may substitute use of a hydrogen chloride CEMS for conducting the hydrogen chloride initial and annual performance test. For units equipped with a hydrogen chloride CEMS, you are not required to monitor the minimum hydrogen chloride sorbent flow rate, monitoring the minimum scrubber liquor pH, and monitoring minimum injection rate.

(h) To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of either a particulate matter CEMS or a particulate matter CPMS for conducting the particulate matter annual performance test. For units equipped with a particulate matter CEMS, you are not required to use other CMS monitoring for PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure). A facility may also substitute use of a particulate matter CEMS for conducting the PM initial performance test.

(i) To demonstrate initial and continuous compliance with the dioxin/furan emissions limit, a facility may substitute use of a continuous automated sampling system for the dioxin/furan initial and annual performance test. You must record the output of the system and analyze the sample according to EPA Method 23 at 40 CFR part 60, appendix A–7. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to dioxin/furan from continuous monitors is published in the **Federal Register**. The owner or operator who elects to continuously sample dioxin/furan emissions instead of sampling and testing using EPA Method 23 at 40 CFR part 60, appendix A–7 must install, calibrate, maintain and operate a continuous automated sampling system and must comply with the requirements specified in § 60.58b(p) and (q). A facility may substitute continuous dioxin/furan monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the dioxin/furan emission limit.

(j) To demonstrate initial and continuous compliance with the mercury emissions limit, a facility may substitute use of a mercury CEMS or and integrated sorbent trap monitoring system for the mercury initial and annual performance test. The owner or operator who elects to continuously measure mercury emissions instead of sampling and testing using EPA Method 29 or 30B at 40 CFR part 60, appendix A–8, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 60.17), or an approved alternative method for measuring mercury emissions, must install, calibrate, maintain and operate the mercury CEMS or integrated sorbent trap monitoringsystem and must comply with performance specification 12A or performance specification 12B, respectively, and quality assurance procedure 5. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. For units equipped with a mercury CEMS or an integrated sorbent trap monitoring system, you are not required to monitor the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the mercury emission limit. Waste-burning kilns must install, calibrate, maintain, and operate a mercury CEMS or an integrated sorbent trap monitoring system as specified in § 60.2710(j).

(k) To demonstrate initial and continuous compliance with the nitrogen oxides emissions limit, a

facility may substitute use of a CEMS for the nitrogen oxides initial and annual performance test to demonstrate compliance with the nitrogen oxides emissions limits. For units equipped with a nitrogen xides CEMS, you are not required to monitor the charge rate, secondary chamber temperature and reagent flow for selective noncatalytic reduction, if applicable:

(1) Install, calibrate, maintain and operate a CEMS for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation and operation of the CEMS; and

(2) Compliance with the emission limit for nitrogen oxides must be determined based on the 30-day rolling average of the hourly emission concentrations using CEMS outlet data, as outlined in § 60.2710(u).

(l) To demonstrate initial and continuous compliance with the sulfur dioxide emissions limit, a facility may substitute use of a CEMS for the sulfur dioxide initial and annual performance test to demonstrate compliance with the sulfur dioxide emissions limits:

(1) Install, calibrate, maintain and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance requirements of procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation and operation of the CEMS; and

(2) Compliance with the sulfur dioxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations using CEMS outlet data, as outlined in § 60.2710(u).

(m) For energy recovery units over 10 MMBtu/hr but less than 250 MMBtu/hr annual average heat input rates that do not use a wet scrubber, fabric filter with bag leak detection system, an electrostatic precipitator, particulate matter CEMS, or particulate matter CPMS, you must install, operate, certify and maintain a continuous opacity monitoring system according to the procedures in paragraphs (m)(1) through (5) of this section by the compliance date specified in § 60.2670. Energy recovery units that use a particulate matter CEMS to demonstrate initial and continuing compliance according to the procedures in § 60.2730(n) are not required to install a continuous opacity monitoring system and must perform the annual performance tests for opacity consistent with § 60.2710(f):

(1) Install, operate and maintain each continuous opacity monitoring system according to performance specification 1 at 40 CFR part 60, appendix B;

(2) Conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in § 60.13 and according to performance specification 1 at 40 CFR part 60, appendix B;

(3) As specified in § 60.13(e)(1), each continuous opacity monitoring system must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period;

(4) Reduce the continuous opacity monitoring system data as specified in § 60.13(h)(1); and

(5) Determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected.

(n) For coal and liquid/gas energy recovery units, incinerators, and small remote incinerators, an owner or operator may elect to install, calibrate, maintain and operate a CEMS for monitoring particulate matter emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who continuously monitors particulate matter emissions instead of conducting performance testing using EPA Method 5 at 40 CFR part 60, appendix A–3 or monitoring with a particulate matter CPMS according to paragraph (r) of this section, must install, calibrate, maintain and operate a PM CEMS and must comply with the requirements specified in paragraphs (n)(1) through (10) of this section:

(1) The PM CEMS must be installed, evaluated and operated in accordance with the requirements of performance specification 11 of appendix B of this part and quality assurance requirements of procedure 2 of appendix F of this part and § 60.13;

(2) The initial performance evaluation must be completed no later than 180 days after the final compliance date for meeting the amended emission limitations, as specified under § 60.2690 or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5 at 40 CFR part 60, appendix A–3 performance tests, whichever is later;

(3) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility must be established according to the procedures and methods specified in § 60.2710(t)(4)(i) through (iv);

(4) The owner or operator of an affected facility must conduct an initial performance test for particulate matter emissions. If PM CEMS are elected for demonstrating compliance, and the initial performance test has not yet been conducted, then initial compliance must be determined by using the CEMS specified in paragraph (n) of this section to measure particulate matter. You must calculate a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, as defined in this subpart, using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7 of this part;

(5) Continuous compliance with the particulate matter emission limit must be determined based on the 30-day rolling average calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, Appendix A–7 of the part from the 1-hour arithmetic average of the CEMS outlet data.

(6) At a minimum, valid continuous monitoring system hourly averages must be obtained as specified § 60.2735;

(7) The 1-hour arithmetic averages required under paragraph (n)(5) of this section must be expressed in milligrams per dry standard cubic meter corrected to 7 percent oxygen (or carbon dioxide)(dry basis) and must be used to calculate the 30-day rolling average emission concentrations. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2);

(8) All valid CEMS data must be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (n)(6) of this section are not met;

(9) The CEMS must be operated according to performance specification 11 in appendix B of this part; and,

(10) Quarterly and yearly accuracy audits and daily drift, system optics, and sample volume checks must be performed in accordance with procedure 2 in appendix F of this part.

(o) To demonstrate initial and continuous compliance with the carbon monoxide emissions limit, a facility

may substitute use of a CEMS for the carbon monoxide initial and annual performance test to demonstrate compliance with the carbon monoxide emissions limits:

(1) Install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 4A or 4B of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation, and operation of the CEMS; and

(2) Compliance with the carbon monoxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using CEMS outlet data, as outlined in § 60.2710(u).

(p) The owner/operator of an affected source with a bypass stack shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time and duration.

(q) For energy recovery units with a heat input capacity of 100 MMBtu/hr or greater that do not use a carbon monoxide CEMS, you must install, operate and maintain the continuous oxygen monitoring system as defined in § 60.2875 according to the procedures in paragraphs (q)(1) through (4) of this section:

(1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2675;

(2) You must operate the oxygen trim system within compliance with paragraph (q)(3) of this section at all times;

(3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen according to paragraph (q)(4) of this section is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test; and

(4) You must calculate and record a 30-day rolling average oxygen concentration using equation 19–19 in section 12.4.1 of EPA Reference Method 19 of Appendix A–7 of this part.

(r) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hr and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (*e.g.,* bag leak detectors, ESP secondary power, PM scrubber pressure):

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with § 60.2710(l) and (r)(1)(i) through (iii) of this section:

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps or the digital signal equivalent;

(ii) The PM CPMS must have a cycle time (*i.e.,* period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes; and

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations increments no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2675.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps or the digital signal equivalent.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps or digital bits).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (r)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report); and

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value;

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify the operation of the emissions control device(s). Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph; and

(iv) PM CPMS deviations leading to more than four required performance

tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

(s) If you use a dry scrubber to comply with the emission limits of this subpart, you must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating limits established during the hydrogen chloride performance test.

(t) If you are required to monitor clinker production because you comply with the production-rate based mercury limit for your waste-burning kiln, you must:

(1) Determine hourly clinker production by one of two methods:

(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or

(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.

(2) Determine the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before the final compliance date of this rule and during each quarter of source operation.

(3) Conduct accuracy checks in accordance with the procedures outlined in your site-specific monitoring plan under § 60.2710(l).

§ 60.2735 Is there a minimum amount of monitoring data I must obtain?

For each continuous monitoring system required or optionally allowed under § 60.2730, you must monitor and collect data according to this section:

(a) You must operate the monitoring system and collect data at all required intervals at all times compliance is required except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods (as specified in § 60.2770(o)), and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(b) You may not use data recorded during the monitoring system malfunctions, repairs associated with monitoring system malfunctions or out-of control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. You must use all the data collected during all other periods, including data normalized for above scale readings, in assessing the operation of the control device and associated control system.

(c) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

Model Rule—Recordkeeping and Reporting

§ 60.2740 What records must I keep?

You must maintain the items (as applicable) as specified in paragraphs (a), (b), and (e) through (w) of this section for a period of at least 5 years:

(a) Calendar date of each record;

(b) Records of the data described in paragraphs (b)(1) through (7) of this section:

(1) The CISWI charge dates, times, weights, and hourly charge rates;

(2) Liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable;

(3) Pressure drop across the wet scrubber system every 15 minutes of operation or amperage to the wet scrubber every 15 minutes of operation, as applicable;

(4) Liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable;

(5) For affected CISWIs that establish operating limits for controls other than wet scrubbers under § 60.2675(d) through (g) or § 60.2680, you must maintain data collected for all operating parameters used to determine compliance with the operating limits. For energy recovery units using activated carbon injection or a dry scrubber, you must also maintain records of the load fraction and corresponding sorbent injection rate records; and

(6) If a fabric filter is used to comply with the emission limitations, you must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in § 60.2675(c).

(7) If you monitor clinker production in accordance with § 60.2730(t):

(i) Hourly clinker rate produced if clinker production is measured directly;

(ii) Hourly measured kiln feed rates and calculated clinker production rates if clinker production is not measured directly;

(iii) 30-day rolling averages for mercury in pounds per million tons of clinker produced;

(iv) The initial and quarterly accuracy of the system of measruing hourly clinker production (or feed mass flow).

(c)–(d) [Reserved]

(e) Identification of calendar dates and times for which data show a deviation from the operating limits in table 3 of this subpart or a deviation from other operating limits established under § 60.2675(d) through (g) or § 60.2680 with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.

(f) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.

(g) Records showing the names of CISWI operators who have completed review of the information in § 60.2660(a) as required by § 60.2660(b), including the date of the initial review and all subsequent annual reviews.

(h) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 60.2655. Records must include documentation of training, the dates of

the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.

(i) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.

(j) Records of calibration of any monitoring devices as required under § 60.2730.

(k) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.

(l) The information listed in § 60.2660(a).

(m) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).

(n) Maintain records of the annual air pollution control device inspections that are required for each CISWI subject to the emissions limits in table 2 of this subpart or tables 6 through 9 of this subpart, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency.

(o) For continuously monitored pollutants or parameters, you must document and keep a record of the following parameters measured using continuous monitoring systems. If you monitor emissions with a CEMS, you must indicate which data are CEMS data during startup and shutdown:

(1) All 6-minute average levels of opacity;

(2) All 1-hour average concentrations of sulfur dioxide emissions;

(3) All 1-hour average concentrations of nitrogen oxides emissions;

(4) All 1-hour average concentrations of carbon monoxide emissions;

(5) All 1-hour average concentrations of particulate matter emissions;

(6) All 1-hour average concentrations of mercury emissions;

(7) All 1-hour average concentrations of HCl CEMS outputs;

(8) All 1-hour average percent oxygen concentrations; and

(9) All 1-hour average PM CPMS readings or particulate matter CEMS outputs.

(p) Records indicating use of the bypass stack, including dates, times and durations.

(q) If you choose to stack test less frequently than annually, consistent with § 60.2720(a) through (c), you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(r) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(s) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(t) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(u) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to § 241.3(b)(1) of this chapter, you must keep a record which documents how the secondary material meets each of the legitimacy criteria under § 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to § 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in § 241.2 and each of the legitimacy criteria in § 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under § 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per § 241.4, you must keep records documenting that the material is a listed non-waste under § 241.4(a).

(v) Records of the criteria used to establish that the unit qualifies as a small power production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) and that the waste material the unit is proposed to burn is homogeneous.

(w) Records of the criteria used to establish that the unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)) and that the waste material the unit is proposed to burn is homogeneous.

§ 60.2745 Where and in what format must I keep my records?

All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.

§ 60.2750 What reports must I submit?

See table 5 of this subpart for a summary of the reporting requirements.

§ 60.2755 When must I submit my waste management plan?

You must submit the waste management plan no later than the date specified in table 1 of this subpart for submittal of the final control plan.

§ 60.2760 What information must I submit following my initial performance test?

You must submit the information specified in paragraphs (a) through (c) of this section no later than 60 days following the initial performance test. All reports must be signed by the facilities manager:

(a) The complete test report for the initial performance test results obtained under § 60.2700, as applicable;

(b) The values for the site-specific operating limits established in § 60.2675 or § 60.2680; and

(c) If you are using a fabric filter to comply with the emission limitations, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained as required by § 60.2730(b).

§ 60.2765 When must I submit my annual report?

You must submit an annual report no later than 12 months following the submission of the information in § 60.2760. You must submit subsequent reports no more than 12 months following the previous report. (If the unit is subject to permitting requirements under title V of the Clean Air Act, you may be required by the permit to submit these reports more frequently.)

§ 60.2770 What information must I include in my annual report?

The annual report required under § 60.2765 must include the items listed in paragraphs (a) through (p) of this section. If you have a deviation from the operating limits or the emission limitations, you must also submit deviation reports as specified in §§ 60.2775, 60.2780, and 60.2785:

(a) Company name and address;

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

(c) Date of report and beginning and ending dates of the reporting period;

(d) The values for the operating limits established pursuant to § 60.2675 or § 60.2680;

(e) If no deviation from any emission limitation or operating limit that applies

to you has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period;

(f) The highest recorded 3-hour average and the lowest recorded 3-hour average (30-day average for energy recovery units), as applicable, for each operating parameter recorded for the calendar year being reported;

(g) Information recorded under § 60.2740(b)(6) and (c) through (e) for the calendar year being reported;

(h) For each performance test conducted during the reporting period, if any performance test is conducted, the process unit(s) tested, the pollutant(s) tested and the date that such performance test was conducted. Submit, following the procedure specified in § 60.2795(b)(1), the performance test report no later than the date that you submit the annual report;

(i) If you met the requirements of § 60.2720(a) or (b), and did not conduct a performance test during the reporting period, you must state that you met the requirements of § 60.2720(a) or (b), and, therefore, you were not required to conduct a performance test during the reporting period;

(j) Documentation of periods when all qualified CISWI operators were unavailable for more than 8 hours, but less than 2 weeks;

(k) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 60.11(d), including actions taken to correct a malfunction;

(l) For each deviation from an emission or operating limitation that occurs for a CISWI for which you are not using a CMS to comply with the emission or operating limitations in this subpart, the annual report must contain the following information:

(1) The total operating time of the CISWI at which the deviation occurred during the reporting period; and

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(m) If there were periods during which the continuous monitoring system, including the CEMS, was out of control as specified in paragraph (o) of this section, the annual report must contain the following information for each deviation from an emission or operating limitation occurring for a CISWI for which you are using a continuous monitoring system to comply with the emission and operating limitations in this subpart:

(1) The date and time that each malfunction started and stopped;

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks;

(3) The date, time, and duration that each continuous monitoring system was out-of-control, including start and end dates and hours and descriptions of corrective actions taken;

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

(7) A summary of the total duration of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the CISWI at which the continuous monitoring system downtime occurred during that reporting period;

(8) An identification of each parameter and pollutant that was monitored at the CISWI;

(9) A brief description of the CISWI;

(10) A brief description of the continuous monitoring system;

(11) The date of the latest continuous monitoring system certification or audit; and

(12) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period.

(n) If there were periods during which the continuous monitoring system, including the CEMS, was not out of control as specified in paragraph (o) of this section, a statement that there were not periods during which the continuous monitoring system was out of control during the reporting period.

(o) A continuous monitoring system is out of control if any of the following occur:

(1) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard;

(2) The continuous monitoring system fails a performance test audit (*e.g.,* cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; and

(3) The continuous opacity monitoring system calibration drift exceeds two times the limit in the applicable performance specification in the relevant standard.

(p) For energy recovery units, include the annual heat input and average annual heat input rate of all fuels being burned in the unit to verify which subcategory of energy recovery unit applies.

§ 60.2775 What else must I report if I have a deviation from the operating limits or the emission limitations?

(a) You must submit a deviation report if any recorded 3-hour average (30-day average for energy recovery units or for PM CPMS) parameter level is above the maximum operating limit or below the minimum operating limit established under this subpart, if the bag leak detection system alarm sounds for more than 5 percent of the operating time for the 6-month reporting period, if a performance test was conducted that deviated from any emission limitation, if a 30-day average measured using a CEMS deviated from any emission limitation.

(b) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).

§ 60.2780 What must I include in the deviation report?

In each report required under § 60.2775, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, include the four items described in paragraphs (a) through (d) of this section:

(a) The calendar dates and times your unit deviated from the emission limitations or operating limit requirements;

(b) The averaged and recorded data for those dates;

(c) Durations and causes of the following:

(1) Each deviation from emission limitations or operating limits and your corrective actions; and

(2) Bypass events and your corrective actions.

(d) A copy of the operating limit monitoring data during each deviation and for any test report that documents the emission levels the process unit(s) tested, the pollutant(s) tested and the date that the performance test was conducted. Submit, following the procedure specified in § 60.2795(b)(1), the performance test report no later than the date that you submit the deviation report.

§ 60.2785 What else must I report if I have a deviation from the requirement to have a qualified operator accessible?

(a) If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in paragraphs (a)(1) and (2) of this section:

(1) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (a)(1)(i) through (iii) of this section:

(i) A statement of what caused the deviation;

(ii) A description of what you are doing to ensure that a qualified operator is accessible; and

(iii) The date when you anticipate that a qualified operator will be available.

(2) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (a)(2)(i) through (iii) of this section:

(i) A description of what you are doing to ensure that a qualified operator is accessible;

(ii) The date when you anticipate that a qualified operator will be accessible; and

(iii) Request approval from the Administrator to continue operation of the CISWI.

(b) If your unit was shut down by the Administrator, under the provisions of § 60.2665(b)(2), due to a failure to provide an accessible qualified operator, you must notify the Administrator that you are resuming operation once a qualified operator is accessible.

§ 60.2790 Are there any other notifications or reports that I must submit?

(a) Yes. You must submit notifications as provided by § 60.7.

(b) If you cease combusting solid waste but continue to operate, you must provide 30 days prior notice of the effective date of the waste-to-fuel switch, consistent with § 60.2710(a). The notification must identify:

(1) The name of the owner or operator of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;

(2) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(3) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(4) The date on which you became subject to the currently applicable emission limits; and

(5) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (*i.e.,* the effective date of the waste-to-fuel switch), consistent with paragraphs (b)(2) and (3) of this section.

§ 60.2795 In what form can I submit my reports?

(a) Submit initial, annual and deviation reports electronically or in paper format, postmarked on or before the submittal due dates. Beginning on April 16, 2021 or once the reporting form has been available in CEDRI for 1 year, whichever is later, you must submit subsequent reports on or before the submittal dates to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www3.epa.gov/ttn/chief/cedri/index.html*). When the date forms become available in CEDRI will be listed on the CEDRI website. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the report is submitted.

(b) Submit results of each performance test and CEMS performance evaluation required by this subpart as follows:

(1) Within 60 days after the date of completing each performance test (*see* § 60.8) required by this subpart, you must submit the results of the performance test following the procedure specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this section:

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www3.epa.gov/ttn/chief/ert/ert_info.html*) at the time of the test, you must submit the results of the performance test to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (*https://cdx.epa.gov/*).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the XML schema listed on the EPA's ERT website. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(2) Within 60 days after the date of completing each continuous emissions monitoring system performance evaluation you must submit the results of the performance evaluation following the procedure specified in either paragraph (b)(1) or (2) of this section:

(i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. CEDRI can be accessed through the EPA's CDX. Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT website. If you claim that some of the performance evaluation information being submitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention:

Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and

(ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 60.4.

(c) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(d) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

§ 60.2800 Can reporting dates be changed?

If the Administrator agrees, you may change the semiannual or annual reporting dates. See § 60.19(c) for procedures to seek approval to change your reporting date.

Model Rule—Title V Operating Permits

§ 60.2805 Am I required to apply for and obtain a Title V operating permit for my unit?

Yes. Each CISWI and ACI subject to standards under this subpart must operate pursuant to a permit issued under Clean Air Act sections 129(e) and Title V.

Model Rule—Air Curtain Incinerators (ACIs)

§ 60.2810 What is an air curtain incinerator?

(a) An ACI operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.

(b) Air curtain incinerators that burn only the materials listed in paragraphs (b)(1) through (3) of this section are only required to meet the requirements under § 60.2805 and under ''Air Curtain Incinerators'' (§§ 60.2810 through 60.2870):

(1) 100 percent wood waste;

(2) 100 percent clean lumber; and

(3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

§ 60.2815 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of state plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section:

(a) Submit a final control plan; and

(b) Achieve final compliance.

§ 60.2820 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

§ 60.2825 What must I include in the notifications of achievement of increments of progress?

Your notification of achievement of increments of progress must include the three items described in paragraphs (a) through (c) of this section:

(a) Notification that the increment of progress has been achieved;

(b) Any items required to be submitted with each increment of progress (see § 60.2840); and

(c) Signature of the owner or operator of the incinerator.

§ 60.2830 When must I submit the notifications of achievement of increments of progress?

Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

§ 60.2835 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent

calendar month until the increment of progress is met.

§ 60.2840 How do I comply with the increment of progress for submittal of a control plan?

For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section:

(a) Submit the final control plan, including a description of any devices for air pollution control and any process changes that you will use to comply with the emission limitations and other requirements of this subpart; and

(b) Maintain an onsite copy of the final control plan.

§ 60.2845 How do I comply with the increment of progress for achieving final compliance?

For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected incinerator is brought online, all necessary process changes and air pollution control devices would operate as designed.

§ 60.2850 What must I do if I close my air curtain incinerator and then restart it?

(a) If you close your incinerator but will reopen it prior to the final compliance date in your state plan, you must meet the increments of progress specified in § 60.2815.

(b) If you close your incinerator but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations on the date your incinerator restarts operation.

§ 60.2855 What must I do if I plan to permanently close my air curtain incinerator and not restart it?

If you plan to close your incinerator rather than comply with the state plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

§ 60.2860 What are the emission limitations for air curtain incinerators?

After the date the initial stack test is required or completed (whichever is earlier), you must meet the limitations in paragraphs (a) and (b) of this section:

(a) Maintain opacity to less than or equal to 10 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (b) of this section; and

(b) Maintain opacity to less than or equal to 35 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.

§ 60.2865 How must I monitor opacity for air curtain incinerators?

(a) Use Method 9 of appendix A of this part to determine compliance with the opacity limitation.

(b) Conduct an initial test for opacity as specified in § 60.8 no later than 180 days after your final compliance date.

(c) After the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of your previous test.

§ 60.2870 What are the recordkeeping and reporting requirements for air curtain incinerators?

(a) Keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.

(b) Make all records available for submittal to the Administrator or for an inspector's onsite review.

(c) Submit an initial report no later than 60 days following the initial opacity test that includes the information specified in paragraphs (c)(1) and (2) of this section:

(1) The types of materials you plan to combust in your ACI; and

(2) The results (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) of the initial opacity tests.

(d) Submit annual opacity test results within 12 months following the previous report.

(e) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date and keep a copy onsite for a period of 5 years.

Model Rule—Definitions

§ 60.2875 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and subparts A and B of this part.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes periods when this unit is not operating. The 720 hours should be consecutive, but not necessarily continuous if operations are intermittent.

Administrator means the Administrator of the U.S. Environmental Protection Agency or his/her authorized representative or Administrator of a State Air Pollution Control Agency.

Agricultural waste means vegetative agricultural materials such as nut and grain hulls and chaff (*e.g.,* almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds, and other vegetative waste materials generated as a result of agricultural operations.

Air curtain incinerator (ACI) means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Auxiliary fuel means natural gas, liquified petroleum gas, fuel oil, or diesel fuel.

Average annual heat input rate means annual heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Burn-off oven means any rack reclamation unit, part reclamation unit, or drum reclamation unit. A burn-off oven is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

Calendar quarter means three consecutive months (nonoverlapping) beginning on: January 1, April 1, July 1, or October 1.

Calendar year means 365 consecutive days starting on January 1 and ending on December 31.

CEMS data during startup and shutdown means the following:

(1) For incinerators and small remote incinerators: CEMS data collected during the first hours of operation of a CISWI startup from a cold start until waste is fed into the unit and the hours

of operation following the cessation of waste material being fed to the CISWI during a unit shutdown. For each startup event, the length of time that CEMS data may be claimed as being CEMS data during startup must be 48 operating hours or less. For each shutdown event, the length of time that CEMS data may be claimed as being CEMS data during shutdown must be 24 operating hours or less;

(2) For energy recovery units: CEMS data collected during the startup or shutdown periods of operation. Startup begins with either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling or process purposes, or producing electricity, or the firing of fuel in a boiler or process heater for any purpose after a shutdown event. Startup ends four hours after when the boiler or process heater makes useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier. Shutdown begins when the boiler or process heater no longer makes useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler or process heater, whichever is earlier. Shutdown ends when the boiler or process heater no longer makes useful thermal energy (such as steam or heat) for heating, cooling, or process purposes and/or generates electricity, and no fuel is being combusted in the boiler or process heater; and

(3) For waste-burning kilns: CEMS data collected during the periods of kiln operation that do not include normal operations. Startup means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first. Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

Chemical recovery unit means combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. A chemical recovery unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart. The following seven types of units are considered chemical recovery units:

(1) Units burning only pulping liquors (*i.e.,* black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process;

(2) Units burning only spent sulfuric acid used to produce virgin sulfuric acid;

(3) Units burning only wood or coal feedstock for the production of charcoal;

(4) Units burning only manufacturing byproduct streams/residue containing catalyst metals that are reclaimed and reused as catalysts or used to produce commercial grade catalysts;

(5) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds;

(6) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes; and

(7) Units burning only photographic film to recover silver.

Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

Clean lumber means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

Commercial and industrial solid waste incineration unit (CISWI) means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241. If the operating unit burns materials other than traditional fuels as defined in § 241.2 that have been discarded, and you do not keep and produce records as required by § 60.2740(u), the operating unit is a CISWI. While not all CISWIs will include all of the following components, a CISWI includes, but is not limited to, the solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI does not include air pollution control equipment or the stack. The CISWI boundary starts at the solid waste hopper (if applicable) and extends through two areas: The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI includes all ash handling systems connected to the bottom ash handling system.

Contained gaseous material means gases that are in a container when that container is combusted.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters. A particulate matter continuous parameter monitoring system (PM CPMS) is a type of CMS.

Cyclonic burn barrel means a combustion device for waste materials that is attached to a 55 gallon, open-head drum. The device consists of a lid, which fits onto and encloses the drum, and a blower that forces combustion air into the drum in a cyclonic manner to enhance the mixing of waste material and air. A cyclonic burn barrel is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation, operating limit, or operator qualification and accessibility requirements; and

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Dioxins/furans means tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans.

Discard means, for purposes of this subpart and 40 CFR part 60, subpart DDDD, only, burned in an incineration unit without energy recovery.

Drum reclamation unit means a unit that burns residues out of drums (*e.g.,* 55 gallon drums) so that the drums can be reused.

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Energy recovery means the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating.

Energy recovery unit means a combustion unit combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for energy recovery. Energy recovery units include units that would be considered boilers and process heaters if they did not combust solid waste.

Energy recovery unit designed to burn biomass (Biomass) means an energy recovery unit that burns solid waste, biomass, and non-coal solid materials but less than 10 percent coal, on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn coal (Coal) means an energy recovery unit that burns solid waste and at least 10 percent coal on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn liquid waste materials and gas (Liquid/gas) means an energy recovery unit that burns a liquid waste with liquid or gaseous fuels not combined with any solid fuel or waste materials.

Energy recovery unit designed to burn solid materials (Solids) includes energy recovery units designed to burn coal and energy recovery units designed to burn biomass.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Foundry sand thermal reclamation unit means a type of part reclamation unit that removes coatings that are on foundry sand. A foundry sand thermal reclamation unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Incinerator means any furnace used in the process of combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for the purpose of reducing the volume of the waste by removing combustible matter. Incinerator designs include single chamber and two-chamber.

In-line coal mill means those coal mills using kiln exhaust gases in their process. Coal mills with a heat source other than the kiln or coal mills using exhaust gases from the clinker cooler alone are not an in-line coal mill.

In-line kiln/raw mill means a system in a Portland Cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is capable of operating without the raw mill operating, but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means an oven or furnace, including any associated preheater or precalciner devices, in-line raw mills, in-line coal mills or alkali bypasses used for processing a substance by burning, firing or drying. Kilns include cement kilns that produce clinker by heating limestone and other materials for subsequent production of Portland Cement. Because the alkali bypass, in-line raw mill and in-line coal mill are considered an integral part of the kiln, the kiln emissions limits also apply to the exhaust of the alkali bypass, in-line raw mill and in-line coal mill.

Laboratory analysis unit means units that burn samples of materials for the purpose of chemical or physical analysis. A laboratory analysis unit is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Load fraction means the actual heat input of an energy recovery unit divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (*e.g.,* for 50 percent load the load fraction is 0.5).

Low-level radioactive waste means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured during the most recent particulate matter or mercury performance test demonstrating compliance with the applicable emission limits.

Modification or *modified CISWI* means a CISWI that has been changed later than August 7, 2013, and that meets one of two criteria:

(1) The cumulative cost of the changes over the life of the unit exceeds 50 percent of the original cost of building and installing the CISWI (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI used to calculate these costs, see the definition of CISWI; and

(2) Any physical change in the CISWI or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.

Municipal solid waste or municipal-type solid waste means household, commercial/retail, or institutional waste. Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes materials discarded by schools, by hospitals (nonmedical), by nonmanufacturing activities at prisons and government facilities, and other similar establishments or facilities. Household, commercial/retail, and institutional waste does include yard waste and refuse-derived fuel. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which include railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12:00 midnight and the following midnight during which any amount of solid waste is combusted at any time in the CISWI.

Oxygen analyzer system means all equipment required to determine the

oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler/process heater, firebox, or other appropriate location. This definition includes oxygen trim systems and certified oxygen CEMS. The source owner or operator is responsible to install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating range. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Part reclamation unit means a unit that burns coatings off parts (*e.g.,* tools, equipment) so that the parts can be reconditioned and reused.

Particulate matter means total particulate matter emitted from CISWIs as measured by Method 5 or Method 29 of appendix A of this part.

Pathological waste means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Process change means any of the following physical or operational changes:

(1) A physical change (maintenance activities excluded) to the CISWI which may increase the emission rate of any air pollutant to which a standard applies;

(2) An operational change to the CISWI where a new type of non-hazardous secondary material is being combusted;

(3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the CISWI (*e.g.,* replacing an electrostatic precipitator with a fabric filter); and

(4) An operational change to the air pollution control devices used to comply with the emission limits for the affected CISWI (*e.g.,* change in the sorbent injection rate used for activated carbon injection).

Rack reclamation unit means a unit that burns the coatings off racks used to hold small items for application of a coating. The unit burns the coating overspray off the rack so the rack can be reused.

Raw mill means a ball or tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Reconstruction means rebuilding a CISWI and meeting two criteria:

(1) The reconstruction begins on or after August 7, 2013; and

(2) The cumulative cost of the construction over the life of the incineration unit exceeds 50 percent of the original cost of building and installing the CISWI (not including land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI used to calculate these costs, see the definition of CISWI.

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels:

(1) Low-density fluff refuse-derived fuel through densified refuse-derived fuel; and

(2) Pelletized refuse-derived fuel.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representatives is approved in advance by the permitting authority;

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(3) For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (*e.g.,* a Regional Administrator of EPA); or

(4) For affected facilities:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or

(ii) The designated representative for any other purposes under part 60.

Shutdown means, for incinerators and small, remote incinerators, the period of time after all waste has been combusted in the primary chamber.

Small, remote incinerator means an incinerator that combusts solid waste (as that term is defined by the Administrator in 40 CFR part 241) and combusts 3 tons per day or less solid waste and is more than 25 miles driving distance to the nearest municipal solid waste landfill.

Soil treatment unit means a unit that thermally treats petroleum-contaminated soils for the sole purpose of site remediation. A soil treatment unit may be direct-fired or indirect fired. A soil treatment unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Solid waste means the term solid waste as defined in 40 CFR 241.2.

Solid waste incineration unit means a distinct operating unit of any facility which combusts any solid waste (as that term is defined by the Administrator in 40 CFR part 241) material from commercial or industrial establishments or the general public (including single and multiple residences, hotels and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act. The term ''solid waste incineration unit'' does not include:

(1) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;

(2) Qualifying small power production facilities, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 769(17)(C)), or qualifying cogeneration facilities, as defined in section 3(18)(B) of the Federal Power

Act (16 U.S.C. 796(18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes; or

(3) Air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the Administrator by rule.

Space heater means a unit that meets the requirements of 40 CFR 279.23. A space heater is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Standard conditions, when referring to units of measure, means a temperature of 68 °F (20 °C) and a pressure of 1 atmosphere (101.3 kilopascals).

Startup period means, for incinerators and small, remote incinerators, the period of time between the activation of the system and the first charge to the unit.

Useful thermal energy means energy (*i.e.,* steam, hot water, or process heat) that meets the minimum operating temperature and/or pressure required by any energy use system that uses energy provided by the affected energy recovery unit.

Waste-burning kiln means a kiln that is heated, in whole or in part, by combusting solid waste (as the term is defined by the Administrator in 40 CFR part 241). Secondary materials used in Portland cement kilns shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel.

Wet scrubber means an add-on air pollution control device that uses an aqueous or alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

Wood waste means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

(1) Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands;

(2) Construction, renovation, or demolition wastes; or

(3) Clean lumber.

TABLE 1 TO SUBPART DDDD OF PART 60—MODEL RULE—INCREMENTS OF PROGRESS AND COMPLIANCE SCHEDULES

Comply with these increments of progress	By these dates [1]
Increment 1-Submit final control plan	(Dates to be specified in state plan).
Increment 2-Final compliance	(Dates to be specified in state plan).[2]

[1] Site-specific schedules can be used at the discretion of the state.

[2] The date can be no later than 3 years after the effective date of state plan approval or December 1, 2005 for CISWIs that commenced construction on or before November 30, 1999. The date can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018, for CISWIs that commenced construction on or before June 4, 2010.

TABLE 2 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS BEFORE [DATE TO BE SPECIFIED IN STATE PLAN] [1]

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Cadmium	0.004 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of appendix A of this part).
Carbon monoxide	157 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10, 10A, or 10B, of appendix A of this part).
Dioxins/furans (toxic equivalency basis).	0.41 nanograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 23 of appendix A of this part).
Hydrogen chloride	62 parts per million by dry volume	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.04 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of appendix A of this part).
Mercury	0.47 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[4]
Opacity	10 percent	Three 1-hour blocks consisting of ten 6-minute average opacity values.	Performance test (Method 9 at 40 CFR part 60, appendix A–4).
Nitrogen oxides	388 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Methods 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter	70 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 5 or 29 of appendix A of this part).

TABLE 2 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS BEFORE [DATE TO BE SPECIFIED IN STATE PLAN] [1]—Continued

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Sulfur dioxide	20 parts per million by dry volume	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c of appendix A of this part).

[1] Applies only to incinerators subject to the CISWI standards through a state plan or the Federal plan prior to June 4, 2010. The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

[2] All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions.

[3] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2710 and 60.2730. As prescribed in § 60.2710(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[4] Incorporated by reference, *see* § 60.17.

TABLE 3 TO SUBPART DDDD OF PART 60—MODEL RULE—OPERATING LIMITS FOR WET SCRUBBERS

For these operating parameters	You must establish these operating limits	And monitor using these minimum frequencies		
		Data measurement	Data recording	Averaging time
Charge rate	Maximum charge rate	Continuous	Every hour	Daily (batch units). 3-hour rolling (continuous and intermittent units).[1]
Pressure drop across the wet scrubber or amperage to wet scrubber.	Minimum pressure drop or amperage.	Continuous	Every 15 minutes	3-hour rolling.[1]
Scrubber liquor flow rate	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling.[1]
Scrubber liquor pH	Minimum pH	Continuous	Every 15 minutes	3-hour rolling.[1]

[1] Calculated each hour as the average of the previous 3 operating hours.

TABLE 4 TO SUBPART DDDD OF PART 60—MODEL RULE—TOXIC EQUIVALENCY FACTORS

Dioxin/furan isomer	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

TABLE 5 TO SUBPART DDDD OF PART 60—MODEL RULE—SUMMARY OF REPORTING REQUIREMENTS [1]

Report	Due date	Contents	Reference
Waste Management Plan	No later than the date specified in table 1 for submittal of the final control plan.	• Waste management plan	§ 60.2755.
Initial Test Report	No later than 60 days following the initial performance test.	• Complete test report for the initial performance test • The values for the site-specific operating limits • Installation of bag leak detection systems for fabric filters.	§ 60.2760.

TABLE 5 TO SUBPART DDDD OF PART 60—MODEL RULE—SUMMARY OF REPORTING REQUIREMENTS [1]—Continued

Report	Due date	Contents	Reference
Annual report	No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report.	• Name and address • Statement and signature by responsible official • Date of report • Values for the operating limits • Highest recorded 3-hour average and the lowest 3-hour average, as applicable, (or 30-day average, if applicable) for each operating parameter recorded for the calendar year being reported. • If a performance test was conducted during the reporting period, the results of the test. • If a performance test was not conducted during the reporting period, a statement that the requirements of § 60.2720(a) were met. • Documentation of periods when all qualified CISWI operators were unavailable for more than 8 hours but less than 2 weeks. • If you are conducting performance tests once every 3 years consistent with § 60.2720(a), the date of the last 2 performance tests, a comparison of the emission level you achieved in the last 2 performance tests to the 75 percent emission limit threshold required in § 60.2720(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. • Any malfunction, deviation, or continuous monitoring system out of control periods information as specified in § 60.2770(k) through (o). • Fuel input information for energy recovery unit subcategory verification as specified in § 60.2770(p).	§§ 60.2765 and 60.2770.
Emission limitation or operating limit deviation report.	By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year.	• Dates and times of deviation • Averaged and recorded data for those dates • Duration and causes of each deviation and the corrective actions taken. • Copy of operating limit monitoring data and any test reports. • Dates, times and causes for monitor downtime incidents.	§ 60.2775 and 60.2780.
Qualified Operator Deviation Notification.	Within 10 days of deviation	• Statement of cause of deviation • Description of efforts to have an accessible qualified operator. • The date a qualified operator will be accessible	§ 60.2785(a)(1).
Qualified Operator Deviation Status Report.	Every 4 weeks following deviation.	• Description of efforts to have an accessible qualified operator. • The date a qualified operator will be accessible • Request for approval to continue operation	§ 60.2785(a)(2).
Qualified Operator Deviation Notification of Resumed Operation.	Prior to resuming operation	• Notification that you are resuming operation	§ 60.2785(b).

[1] This table is only a summary, see the referenced sections of the rule for the complete requirements.

TABLE 6 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS ON AND AFTER [DATE TO BE SPECIFIED IN STATE PLAN] [1]

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Cadmium	0.0026 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Carbon monoxide	17 parts per million dry volume	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis)	4.6 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	0.13 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).

TABLE 6 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS ON AND AFTER [DATE TO BE SPECIFIED IN STATE PLAN] [1]—Continued

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Hydrogen chloride	29 parts per million dry volume	3-run average (For Method 26, collect a minimum volume of 60 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.015 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0048 milligrams per dry standard cubic meter.	3-run average (For Method 29 an ASTM D6784–02 (Reapproved 2008),[4] collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[4]
Nitrogen oxides	53 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter filterable	34 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8).
Sulfur dioxide	11 parts per million dry volume	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).
Fugitive ash	Visible emissions for no more than 5% of the hourly observation period.	Three 1-hour observation periods	Visible emission test (Method 22 at 40 CFR part 60, appendix A–7).

[1] The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

[2] All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

[3] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2710 and 60.2730. As prescribed in § 60.2710(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[4] Incorporated by reference, see § 60.17.

TABLE 7 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO ENERGY RECOVERY UNITS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]

For the air pollutant	You must meet this emission limitation [2]		Using this averaging time [3]	And determining compliance using this method [3]
	Liquid/gas	Solids		
Cadmium	0.023 milligrams per dry standard cubic meter.	Biomass-0.0014 milligrams per dry standard cubic meter. Coal-0.0017 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Carbon monoxide	35 parts per million dry volume.	Biomass-260 parts per million dry volume. Coal-95 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis).	2.9 nanograms per dry standard cubic meter.	Biomass-0.52 nanograms per dry standard cubic meter. Coal-5.1 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meter).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	0.32 nanograms per dry standard cubic meter.	Biomass-0.12 nanograms per dry standard cubic meter. Coal-0.075 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).

TABLE 7 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO ENERGY RECOVERY UNITS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]—Continued

For the air pollutant	You must meet this emission limitation [2]		Using this averaging time [3]	And determining compliance using this method [3]
	Liquid/gas	Solids		
Hydrogen chloride	14 parts per million dry volume.	Biomass-0.20 parts per million dry volume. Coal-58 parts per million dry volume.	3-run average (for Method 26, collect a minimum of 120 liters; for Method 26A, collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.096 milligrams per dry standard cubic meter.	Biomass-0.014 milligrams per dry standard cubic meter. Coal-0.057 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0024 milligrams per dry standard cubic meter.	Biomass-0.0022 milligrams per dry standard cubic meter. Coal-0.013 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784–02 (Reapproved 2008),[4] collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[4]
Nitrogen oxides	76 parts per million dry volume.	Biomass-290 parts per million dry volume. Coal-460 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter filterable	110 milligrams per dry standard cubic meter.	Biomass-11 milligrams per dry standard cubic meter. Coal-130 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8) if the unit has an annual average heat input rate less than or equal to 250 MMBtu/hr; or PM CPMS (as specified in § 60.2710(x)) if the unit has an annual average heat input rate greater than 250 MMBtu/hr.
Sulfur dioxide	720 parts per million dry volume.	Biomass-7.3 parts per million dry volume. Coal-850 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods.	Visible emission test (Method 22 at 40 CFR part 60, appendix A–7).

[1] The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

[2] All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

[3] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2710 and 60.2730. As prescribed in § 60.2710(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[4] Incorporated by reference, see § 60.17.

TABLE 8 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO WASTE-BURNING KILNS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3 4]
Cadmium	0.0014 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8).

TABLE 8 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO WASTE-BURNING KILNS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]—Continued

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3 4]
Carbon monoxide	110 (long kilns)/790 (preheater/precalciner) parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis)	1.3 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	0.075 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Hydrogen chloride	3.0 parts per million dry volume	3-run average (collect a minimum volume of 1 dry standard cubic meter), or 30-day rolling average if HCl CEMS is being used.	If a wet scrubber or dry scrubber is used, performance test (Method 321 at 40 CFR part 63, appendix A of this part). If a wet scrubber or dry scrubber is not used, HCl CEMS as specified in § 60.2710(j).
Lead	0.014 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8).
Mercury	0.011 milligrams per dry standard cubic meter. Or 58 pounds/million tons of clinker	30-day rolling average	Mercury CEMS or integrated sorbent trap monitoring system (performance specification 12A or 12B, respectively, of appendix B and procedure 5 of appendix F of this part), as specified in § 60.2710(j).
Nitrogen oxides	630 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter filterable	13.5 milligrams per dry standard cubic meter.	30-day rolling average	PM CPMS (as specified in § 60.2710(x)).
Sulfur dioxide	600 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters; for Method 6C, 1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).

[1] The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

[2] All emission limitations are measured at 7 percent oxygen (except for CEMS and integrated sorbent trap monitoring system data during start-up and shutdown), dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

[3] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2710 and 60.2730. As prescribed in § 60.2710(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[4] Alkali bypass and in-line coal mill stacks are subject to performance testing only, as specified in 60.2710(y)(3). They are not subject to the CEMS, integrated sorbent trap monitoring system, or CPMS requirements that otherwise may apply to the main kiln exhaust.

TABLE 9 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO SMALL, REMOTE INCINERATORS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Cadmium	0.95 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A–8).
Carbon monoxide	64 parts per million dry volume	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis)	4,400 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Dioxins/furans (toxic equivalency basis).	180 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods	Visible emissions test (Method 22 at 40 CFR part 60, appendix A–7).

TABLE 9 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO SMALL, REMOTE INCINERATORS AFTER MAY 20, 2011 [DATE TO BE SPECIFIED IN STATE PLAN] [1]—Continued

For the air pollutant	You must meet this emission limitation [2]	Using this averaging time [3]	And determining compliance using this method [3]
Hydrogen chloride	300 parts per million dry volume	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	2.1 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0053 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784–02 (Reapproved 2008),[3] collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008).[4]
Nitrogen oxides	190 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter (filterable)	270 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8).
Sulfur dioxide	150 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters per run; for Method 6C, 1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).

[1] The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

[2] All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

[3] In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in §§ 60.2710 and 60.2730. As prescribed in § 60.2710(u), if you use a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, your averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

[4] Incorporated by reference, see § 60.17.

[FR Doc. 2019–05529 Filed 4–15–19; 8:45 am]

BILLING CODE 6560–50–P

MISSOURI–1997 ANNUAL $PM_{2.5}$ NAAQS—Continued

[Primary and secondary]

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date [2]	Type
St. Louis County	August 3, 2018	Attainment		
St. Louis City	August 3, 2018	Attainment		

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* * * * * * *

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is 90 days after January 5, 2005, unless otherwise noted.
[2] This date is July 2, 2014, unless otherwise noted.

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[FR Doc. 2018–16003 Filed 8–2–18; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2016–0442; FRL–9981–06–OAR]

RIN 2060–AS92

National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry Residual Risk and Technology Review

Correction

In rule document 2018–15718 beginning on page 35122 in the issue of Wednesday, July 25, 2018, make the following correction:

Table 1 to Subpart LLL of Part 63 [Corrected]

■ On page 35135, the table should read as set forth below:

TABLE 1 TO SUBPART LLL OF PART 63—APPLICABILITY OF GENERAL PROVISIONS

Citation	Requirement	Applies to subpart LLL	Explanation
*	* * * * *	*	*
63.10(e)(3)(v)	Due Dates for Excess Emissions and CMS Performance Reports.	No	§ 63.1354(b)(9) specifies due date.
*	* * * * *	*	*

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[EPA–HQ–SFUND–2010–1086; FRL–9979–68–OLEM]

RIN 2050–AG67

Addition of a Subsurface Intrusion Component to the Hazard Ranking System; Corrections

AGENCY: Environmental Protection Agency (EPA).

ACTION: Correcting amendments.

SUMMARY: On January 9, 2017, the Environmental Protection Agency published a final rule which added subsurface intrusion component to the Superfund Hazard Ranking System. That document inadvertently failed to update the Table of Contents and contained a few other typographical errors. This document corrects the final regulation.

DATES: This correction is effective August 3, 2018.

FOR FURTHER INFORMATION CONTACT: Terry Jeng, phone: (703) 603–8852, email: *jeng.terry@epa.gov,* Site Assessment and Remedy Decisions Branch, Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation (Mailcode 5204P), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

SUPPLEMENTARY INFORMATION: This is EPA's erratum to the final rule titled Addition of a Subsurface Intrusion Component to the Hazard Ranking System, published January 9, 2017 (82 FR 2760). This is the second set of corrections. The first set of corrections was published in the **Federal Register** on January 31, 2018 (83 FR 4430). This document augments those corrections.

Section 553 of the Administrative Procedure Act (APA), 5 U.S.C. 553(b)(3)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. *See Utility Solid Waste Activities Group* v. *EPA,* 236 F.3d 749, 752 (D.C. Cir. 2001). We have determined that there is good

8-Hour Ozone
Limited Maintenance Plan

for the

Birmingham
1997 8-Hour Ozone Maintenance Area

November 2019

Prepared by:

Alabama Department of Environmental Management

Air Division

Planning Branch

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PREFACE:

This document contains Alabama's limited maintenance plan for the Birmingham area for the 1997 8-Hour National Ambient Air Quality Standard for ground-level ozone.

EXECUTIVE SUMMARY:

INTRODUCTION

Ozone is a highly reactive gas that is both a natural and man-made product that occurs in the Earth's upper atmosphere as well as at ground level. Ozone in the upper atmosphere, called stratospheric ozone, is beneficial and forms a protective layer that shields us from the sun's harmful ultraviolet rays. Tropospheric ozone, which occurs at ground-level, is a harmful air pollutant effecting people's health and the environment. It is the main ingredient in "smog". People most at risk from breathing air containing ozone include those with asthma, children, older adults, and people who are active outdoors. Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas.

Ground-level ozone is not emitted directly into the air but is created by chemical reactions between two major classes of air pollutants: oxides of nitrogen (NOx) and volatile organic compounds (VOCs). These reactions typically occur in the presence of heat and sunlight, resulting in higher ambient ozone concentrations in summer months. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOCs.

The 1997 8-hour National Ambient Air Quality Standard (NAAQS) for ground-level ozone is 80 parts per billion (ppb) which is based on an eight-hour average sample. The number of significant figures in the level of the standard dictates the rounding convention for comparing the computed 3-year average annual fourth-highest daily maximum 8-hour average ozone concentration with the level of the standard. The third decimal place of the computed value is rounded, with values equal to or greater than 5 rounding up. This 3-year average is the design value.

Compliance with the NAAQS for ground-level ozone is based on the 3-year design value. A violation of the 1997 8-hour ozone NAAQS occurs when a 3-year design value of 85 ppb or higher is recorded at any monitor and could result in the area being designated nonattainment for the 1997 8-hour ozone standard. When the air quality in an area designated by EPA as nonattainment improves and attains a design value that meets the standard and all redesignation requirements of the CAA are met, the EPA may designate the area as a maintenance area after receiving an approvable redesignation request and maintenance plan.

DESIGNATIONS

On April 15, 2004, the United States Environmental Protection Agency (EPA) designated Jefferson and Shelby counties as marginal nonattainment for the 1997 8-hour ozone standard. The nonattainment designation was an action taken by the EPA under Section 107(d) of the Clean Air Act (CAA). The CAA requires that some areas be designated as nonattainment if a monitor is found to be in violation of a NAAQS. The official designations and classifications

were printed in the Federal Register on April 30, 2004 (69 FR 23858). This designation became effective on June 15, 2004.

Upon attainment of the 1997 8-hour ozone NAAQS and in compliance with CAA section 175A(a), on January 27, 2006, the Alabama Department of Environmental Management (ADEM) submitted the final redesignation request and maintenance plan to EPA requesting that the Birmingham area be redesignated to attainment of the 1997 8-hour ozone standard. This request was based on compliant monitoring data from 2003-2005. On May 12, 2006, the Birmingham area was redesignated to attainment/maintenance for the 1997 8-hour ozone NAAQS (71 FR 27631). After redesignation to attainment, the Birmingham area violated the standard with 2004-2006 monitoring data. On February 6, 2008, Alabama submitted a SIP revision to EPA to fulfill ADEM's commitment to adopt, within 18 months of a violation of the 1997 8-hour ozone standard, one or more contingency measures to help the area re-attain the standard (74 FR 37977). Specifically, ADEM implemented additional permit conditions for two cement kilns. The area re-attained the standard and has had no subsequent violations.

Under section 175A(b), 8 years after the redesignation of an area to attainment and after the submittal of the initial 10 year maintenance plan, states are required to submit an additional revision to the SIP providing a plan for maintaining the NAAQS for 10 years after the expiration of the initial 10 year maintenance plan. This would have required the State of Alabama to submit an updated maintenance plan for the 1997 8-hour ozone standard in May 2014.

EPA revoked the 1997 8-hour ozone standard on April 6, 2015. In anticipation of this revocation and in advance of the May 2014 deadline to submit the update to the initial maintenance plan, EPA advised the State of Alabama that it would be unnecessary for the state to submit the revision to the maintenance plan upon revocation of the 1997 8-hour ozone standard; therefore, an update was not submitted.

On February 16, 2018, the United States Court of Appeals for the DC Circuit decided in the case of the South Coast Air Quality Management District v. Environmental Protection Agency, et al., that EPA's Final Rule revoking the 1997 8-hour ozone NAAQS was inconsistent with the CAA in waiving the 175A maintenance plan requirements for "orphan nonattainment areas". Therefore, to complete the maintenance planning process for the Birmingham 1997 8-hour ozone maintenance area, the state must submit to EPA a SIP revision, which updates the initial 10 year maintenance plan. This SIP revision is intended to satisfy that requirement. For development of the maintenance plan update, Alabama followed the November 20, 2018, resource document provided by the EPA.

AIR QUALITY

Since the Birmingham area has been redesignated to maintenance status for the 1997 8-hour ozone standard, the area has continued to meet the standard, as well as the 2008 and 2015 8-hour ozone standards. The major emissions reductions contributing to the continued maintenance of the 1997 8-hour ozone standard and compliance with the subsequent ozone standards are a result

of lower vehicle tailpipe emissions associated with an increasing number of newer vehicles on Alabama roads, and the implementation of the federal ozone transport rules such as the NOx SIP Call, the Clean Air Interstate Rule (CAIR), and the Cross-State Air Pollution Rule (CSAPR), which address the transport of ozone precursors across state lines.

The most recent 5 years of ozone monitoring data (2013-2018) for the Birmingham area is well below the 1997 8-hour ozone standard. Based on monitoring data from 2016-2018, the Birmingham area currently has an 8-hour ozone design value of 67 ppb, which is 79% of the 85 ppb exceedance level of the 1997 8-hour ozone NAAQS.

REQUIREMENTS FOR LIMITED MAINTENANCE PLAN

When an area has monitoring data at 85% of the exceedance level of the NAAQS or lower, a state may choose the less rigorous maintenance plan option of a limited maintenance plan. A limited maintenance plan requires an attainment year emissions inventory, a commitment to continue monitoring in the ozone maintenance area and a contingency plan.

Under a limited maintenance plan, a maintenance demonstration is considered to be satisfied if the monitoring data shows that the area is meeting the air quality criteria for a limited maintenance plan (i.e., 85% of the exceedance level of the NAAQS). The EPA has determined that the continued applicability of prevention of significant deterioration requirements, and control measures already contained in the State Implementation Plan and federal measures, such as the federal motor vehicle control program, should provide adequate assurance of maintenance for such areas. Additionally, with an approved ozone limited maintenance plan, federal actions requiring conformity determinations under the transportation conformity or general conformity rules would be considered to satisfy the budget test required in the respective rules.

The State of Alabama has chosen the limited maintenance plan approach for this update to the original Birmingham 1997 8-hour ozone maintenance plan submitted in January 2006. This document serves as the maintenance plan through 2026 for the Birmingham 1997 8-hour ozone maintenance area.

CONTINGENCY MEASURES

Section 175A(d) of the Clean Air Act Amendments requires the inclusion of contingency provisions that would be implemented by the State to promptly correct a NAAQS violation that might occur after redesignation. The primary trigger of Alabama's contingency plan will be a quality assured/quality controlled violating design value of the 1997 8-hour ozone NAAQS at any monitor.

In the event that any individual monitor in the maintenance area records an annual fourth high reading of 85 ppb or higher, indicating that a violation of the three-year design value may be imminent, the state will evaluate existing control measures to determine whether any further emission reduction measures should be implemented at that time. If a violation of the 1997 8-hour ozone NAAQS occurs, ADEM will implement the appropriate contingency measures needed to assure future attainment of the ozone NAAQS within eighteen to twenty-four months of the monitored violation. If determined necessary, the adoption of rules for ensuring attainment and maintenance of the 8-hour ozone NAAQS will begin. In addition to at least one contingency measure being implemented upon a violation, pursuant to Section 175A (d), all control measures in place prior to redesignation to attainment will remain in place.

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1.0 INTRODUCTION

1.1 What is Ozone?

Ozone is a gas that occurs in the Earth's upper atmosphere as well as at ground level. Ozone in the upper atmosphere forms a protective layer that shields us from the sun's harmful ultraviolet rays. Ground-level ozone is a harmful air pollutant effecting people's health and the environment. People most at risk from breathing air containing ozone include those with asthma, children, older adults, and people who are active outdoors. Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas.

Ground-level ozone is not emitted directly into the air but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOCs). These reactions typically occur in the presence of heat and sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOCs.

The 1997 8-hour National Ambient Air Quality Standard (NAAQS) for ground-level ozone is 80 parts per billion (ppb) based on an eight-hour average sample. Compliance with the NAAQS for ground-level ozone is based on the three-year average of the annual fourth highest 8-hour average ozone concentrations. The resulting concentration represents an 8-hour ozone design value. A violation of the 1997 8-hour ozone NAAQS occurs when the design value exceeds 84 ppb at any monitor.

1.2 Clean Air Act of 1990

Since the 1977 Amendments to the Clean Air Act, areas of the country that had not attained the ambient standard for a particular pollutant were formally designated as nonattainment for that pollutant. This formal designation concept was retained in the 1990 Amendments; however, areas designated as nonattainment were to be classified as to the degree of nonattainment. Section 181 of the Clean Air Act Amendments (CAAA) of 1990 established five categories of nonattainment for ozone. For the 1997 8-hour ozone standard, the classifications are marginal (design value between 85 and 91 ppb), moderate (design value between 92 and 106 ppb), serious (design value between 107 and 119 ppb), severe (design value between 120 and 186 ppb), and extreme (design value of 187 ppb and above). Areas that do not meet the classification scheme have been designated as "not-classified".

The design value is based on 8-hour average ambient concentrations of ozone, and is used to compare with the ozone NAAQS. Specifically, the three-year average of the annual fourth highest 8-hour average ozone concentrations is used for determining the design value. The highest design value among all monitoring sites becomes the design value for the area.

1.3 Nature of Problem in Alabama

The Birmingham area experienced violations of the NAAQS in the early 2000's and was designated as nonattainment for the 1997 8-Hour ozone NAAQS in 2004. The initial recommendations were sent in July 2003 to the EPA Region IV Administrator, as required by section 107(d)(1)(A) of the 1990 CAAA. These designations were based on data from the years 2000 through 2002 and recommended Jefferson, Shelby and Morgan counties be designated nonattainment for the 1997 8-hour ozone NAAQS. In November of 2003, the recommendation was amended to exclude Morgan and Jefferson counties based on updated monitoring data. EPA's final designation was made in April 2004, designating Jefferson and Shelby counties as marginal nonattainment for the 1997 8-hour ozone standard.

The Birmingham area was designated as nonattainment and classified as marginal under the provisions outlined in Sections 181 and 182 of the CAAA. The design value for the Birmingham area was 87 ppb (based on 2001-2003 data). Since the design values were less than 92 ppb, the area was designated as marginal. With a marginal designation, the Birmingham area had until April 2007 to attain the standard.

Figure 1.3 is a map of the area designated as nonattainment for the 1997 8-hour ozone standard.

Figure 1.3 Map of Area Designated as Nonattainment for 1997 8-hour Ozone NAAQS in Alabama

ADEM submitted a redesignation request and maintenance plan for the Birmingham area to the EPA in January 2006, based upon achieving 3 years of compliant air quality data from 2003 to 2005. The area was redesignated to attainment/maintenance for ozone on May 12, 2006 (71 FR 27631).

1.4 Limited Maintenance Plan Option

Alabama is using the limited maintenance plan option for this revision to the original maintenance plan. The requirements of a limited maintenance plan for ground-level ozone are explained in the November 16, 1994, memorandum from Sally L. Shaver (See Appendix A). The guidance allows for a less rigorous maintenance plan than was formerly required in developing attainment/maintenance plans for ozone nonattainment areas that have design values at or below 85% of the exceedance level of the 1997 8-hour ozone NAAQS (i.e., 85 ppb).

Currently, the Birmingham area is well below the 1997 8-hour ozone NAAQS. The current design value for the period 2016 – 2018 is 67 ppm (79% of the exceedance level of the 1997 8-hour ozone NAAQS). The design value for the area was determined using the three-year average of the annual fourth highest 8-hour average ozone concentrations. The highest design value for all the monitoring sites in an area is the accepted design value.

The limited maintenance plan approach requires the development of an attainment emissions inventory, but does not require projected future years emissions inventories as with a typical maintenance plan. The maintenance demonstration is considered to be satisfied if the monitoring data shows that the area is meeting the air quality criteria for a limited maintenance plan (i.e. 85% or less of the exceedance level for the 1997 8-hour ozone NAAQS), and if the area has demonstrated a stable or improving air quality trend. The EPA has determined that the continued applicability of prevention of significant deterioration requirements, and control measures already contained in the State Implementation Plan (SIP) and federal measures, such as the federal motor vehicle control program and the various transport rules, should provide adequate assurance of maintenance for such areas.

The limited maintenance plan, like a traditional maintenance plan, requires a commitment to continue operation of an appropriate, EPA-approved air quality monitoring network, in accordance with 40 CFR Part 58. This is to verify the attainment status of the area over the maintenance period, especially since there is no cap on the emissions for a limited maintenance plan. A contingency plan is also required to promptly correct any violation of the 1997 8-hour ozone standard that occurs after approval of the limited maintenance plan. The contingency measures do not have to be fully adopted; however the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered.

The final requirement in a traditional maintenance plan is the establishment of motor vehicle emission budgets for transportation conformity purposes and emission budgets for general conformity purposes. In a limited maintenance plan, the emission budgets are treated as essentially non-constraining for the length of the maintenance period because it is unreasonable

to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result. Therefore, the EPA concluded in the guidance that for a limited maintenance area, the emissions need not be capped for the maintenance period and the "budget test" of the transportation and general conformity rules are met. This is discussed in more detail in Section 3.6.

2.0 DISCUSSION OF ATTAINMENT

After attaining the 1997 8-hour ozone standard based on 2003-2005 ambient air monitoring data, the Birmingham area violated the standard with 2004-2006 monitoring data. On February 6, 2008, Alabama submitted a SIP revision to EPA to fulfill ADEM's commitment to adopt, within 18 months of a violation of the 1997 8-hour ozone standard, one or more contingency measures to help the area re-attain the standard (74 FR 37977). Specifically, ADEM implemented additional permit conditions for two cement kilns. The area re-attained the standard and has had no subsequent violations. Since the Birmingham area has been redesignated to maintenance status for ozone, the area has continued to meet the 1997 8-hour ozone NAAQS, as well as all subsequent revisions to the ozone standard. Table 2.0 shows the air quality data of the Birmingham maintenance area based on the three-year average of the annual fourth highest 8-hour ozone design value for years 2012 through 2018. All monitors have maintained the 1997 8-hour ozone NAAQS.

Table 2.0 Birmingham Air Quality Data for 8-hour Ozone NAAQS

Site ID	12-14	% of 85 ppb	13-15	% of 85 ppb	14-16	% of 85 ppb	15-17	% of 85 ppb	16-18	% of 85 ppb
Helena 01-117-0004	68	80	65	76	67	79	66	78	67	79
Fairfield 01-073-1003	68	80	65	76	66	78	66	78	65	76
McAdory 01-073-1005	68	80	64	75	66	78	65	76	65	76
Hoover 01-073-2006	67	79	65	76	66	78	66	78		
Tarrant 01-073-6002	71	84	67	79	68	80	68	80	67	79
Corner 01-073-5003	64	75	63	74	64	75	64	75	63	74
North Birmingham 01-073-0023	67	79	64	75	68	80	66	77	65	76
Leeds 01-073-1010	69	81	63	74	64	75	63	74	66	78

A number of non-required monitors have been shut down since the ambient air concentrations have been significantly below the ozone NAAQS. The Pinson and Providence monitors were shut down at the end of 2012, and the Hoover monitor was shut down at the end of 2017.

The air quality data listed above clearly demonstrates that the Birmingham area is sufficiently below the 1997 8-hour ozone NAAQS to qualify for the limited maintenance plan option.

3.0 LIMITED MAINTENANCE PLAN

3.1 Attainment Emission Inventory

There are four different man-made emission inventory source classifications: point, area, nonroad and on-road sources. Major point sources are stationary source facilities that have the potential to emit greater than 100 tons per year (TPY) of NOx or VOCs. The point source emissions are calculated from data collected annually from the sources. There may be several emission sources for one facility. Emissions data is collected for each point source at a facility and the data is reported to the State or local air agencies.

Area sources are those sources whose emissions are relatively small, but due to the large number of sources, the collective emissions could be significant (i.e., combustion of fuels for heating and structure fires). For area sources, emissions are estimated by multiplying an emission factor by some known indicator of collective activity, such as fuel usage, number of households, or population. These types of emissions are estimated on the county level.

Nonroad mobile sources are pieces of equipment that can move but do not use the roadways (i.e., lawn mowers, construction equipment, and railroad locomotives). For nonroad as well as on-road mobile sources, EPA used the Motor Vehicle Emission Simulator (MOVES) mobile model to generate emissions. The MOVES model includes the road class vehicle miles traveled as an input file and can directly output the estimated emissions. However, locomotive and marine craft engine emissions are not modeled using MOVES. Those emissions are estimated by taking an activity and multiplying by an emission factor. These emissions are also estimated at the county level.

Table 3.1 displays the 2014 attainment year emissions inventory as required for a limited maintenance plan. All emissions inventory information was obtained from the 2014 NEI V2.

Table 3.1 2014 VOC and NOx Emissions (tons/year) for the Birmingham Maintenance Area

Birmingham Maintenance Area	Point Source	Area Source	On-Road Mobile Source	Nonroad Mobile Source	Total
VOC	3,899.07	78,794.64	9,587.72	4,046.32	96,327.75
NOX	31,365.76	7,679.80	17, 394.50	3,470.60	59,910.66
Total	35,264.83	86,474.44	26,982.22	7,516.92	156,238.41

3.2 Emissions Control Program

The main element of the maintenance plan is the emissions control program. The emissions control program contains the emission controls necessary to maintain the ambient air quality standards. The purpose of the emissions control program is to prevent the ambient air quality standards from being violated and thereby eliminates the need for more costly controls being imposed on industry and the general public. Each component of the state's emissions control program is essential in demonstrating maintenance of the air quality standards.

The emissions control program consists of federal and state measures. The federal measures include the Federal Motor Vehicle Control Program, the Federal Nonroad Engine Control Programs, and various ozone transport rules. State measures include the Prevention of Significant Deterioration program. All of these programs have already been implemented at the state or federal level, or both.

Federal Motor Vehicle Control Program

The Federal Motor Vehicle Control Program specifies emissions standards for motor vehicles. Newer motor vehicles are required to meet lower emissions standards for ozone precursors. As fleet turnover occurs, the emissions per vehicle miles traveled decreases. Two sets of standards were defined for light-duty vehicles in the Clean Air Act Amendments (CAAA) of 1990: Tier 1 and Tier 2 standards. Once Tier 2 standards were fully phased-in, the EPA adopted the Tier 3 emission regulations. The succession of these regulations can be summarized as follows:

- **Tier 1 standards** were phased-in between 1994 and 1997. Tier 1 standards applied to all new light-duty vehicles (LDV) of less than 8500 lbs.
- **Tier 2 standards** were phased-in between 2004 and 2009. The Tier 2 rule extended the applicability of the light-duty emission standards and included medium-duty passenger vehicles (MDPV) weighting between 8500 and 10,000 lbs.

- **Tier 3 standards** will be phased-in between 2017 and 2025. Tier 3 regulations include emission standards for chassis-certified heavy-duty vehicles (HDV) weighting up to 14,000 lbs. (Class 2b and Class 3).

The EPA standards designed to reduce nitrogen oxides (NOx) and volatile organic compounds (VOC) emissions from heavy-duty gasoline and diesel highway vehicles began to take effect in 2004. A second phase of standards and testing procedures began in 2007 and will reduce particulate matter from heavy-duty highway engines and reduce highway diesel fuel sulfur content to 15 ppm. In total, the program is expected to achieve a 90% reduction in particulate matter (PM) emissions and a 95% reduction in NOx emissions for these new engines using low sulfur diesel. These new engines will also have a co-benefit of reducing CO emissions as well. These emission reductions are federally enforceable.

Federal Nonroad Engine Control Programs

Large spark-ignition engines contribute to ozone formation and ambient CO and particulate matter levels in urban areas. Tier 1 of this standard was implemented in 2004, Tier 2 in 2007 and Tier 3 started in 2017. Like the large spark-ignition engines, recreational vehicles contribute to ozone formation and ambient carbon monoxide and particulate matter levels. For off-highway motorcycles and all-terrain vehicles, the exhaust emissions standard was phased in, with 50% of model year 2006 engines required to meet the standard and all model years 2007 and later required to meet the standard. Recreational marine diesel engines over 37 horsepower are used in yachts, cruisers, and other types of pleasure craft. Recreational marine engines contribute to ozone formation and particulate matter levels, especially in areas in and around marinas. Depending on the size of the engine, the standard began phasing in in 2006.

When all of the nonroad spark-ignition and recreational engine standards are fully implemented, an overall 72% reduction in hydrocarbons, 80% reduction in NOx, and 56% reduction in CO emissions are expected by 2020. These controls will help reduce ambient concentrations of ozone, CO, and fine particulate matter. These emission reductions are federally enforceable.

Ozone Transport Rules

In accordance with 40 CFR Part 75 and in response to the NOx SIP call which addresses the transport of ground level ozone, Alabama utilized the NO_X Budget Trading Program (NBTP), the Clean Air Interstate Rule (CAIR), and currently the Cross State Air Pollution Rule (CSAPR). Alabama will continue to comply with the requirements of the applicable transport rules as required by EPA to address ozone transport.

Prevention of Significant Deterioration

All new major sources and major modifications of existing sources that emit ozone precursors will be evaluated under the prevention of significant deterioration program and will be required to use best available control technology.

3.3 Maintenance Demonstration

In a limited maintenance plan, the maintenance demonstration requirement is considered to be satisfied if the monitoring data shows the area is meeting the air quality criteria for limited maintenance areas (i.e., 85% or lower of the exceedance level for the 1997 8-hour ozone NAAQS). There is no requirement to project emissions over the maintenance period. The EPA believes that the continued applicability of prevention of significant deterioration requirements control measures already in the SIP and federal measures, such as the Federal Motor Vehicle Control Program and the various ozone transport rules, should provide adequate assurance of maintenance for such areas. When the EPA approves a limited maintenance plan, it is concluding that an emissions budget may be treated as essentially non-constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the 1997 8-hour ozone NAAQS would result. The ozone maintenance period is through June of 2026 for the Birmingham 1997 8-hour ozone maintenance area.

3.4 Monitoring Network

To verify the attainment status of the area over the maintenance period, the limited maintenance plan should contain provisions for continued operation of an appropriate, EPA-approved air quality monitoring network, in accordance with 40 CFR Part 58. This is particularly important for areas using a limited maintenance plan because there will be no cap on emissions. ADEM commits to continue operating all required ozone monitors in the Birmingham maintenance area in accordance with 40 CFR Part 58. Any monitor shutdowns or relocations will only be made with the approval of the EPA. At the end of 2012, The Jefferson County Department of Health discontinued the operation of two ozone monitors located in Jefferson County, and another at the end of 2017. These shutdowns were all approved by the EPA and were reflected in the appropriate annual monitoring network plans. No other plans are currently under way to discontinue operation, relocation or otherwise affect the integrity of the existing ambient monitoring network for ozone. The existing monitoring network is operated consistent with all requirements under 40 CFR Part 58.

3.5 Contingency Plan

3.5.1

Section 175A(d) of the Clean Air Act Amendments requires the inclusion of contingency provisions that would be implemented by the State to promptly correct a NAAQS violation that might occur after redesignation.

The initial contingency plan trigger is when any individual monitor in the maintenance area records an annual fourth high reading of 85 ppb or higher. If this occurs and ambient monitoring data indicates that a violation of the three-year design value may be imminent, ADEM will evaluate existing control measures to determine whether any further emission reduction measures should be implemented at that time. The second contingency plan trigger will be a quality assured/quality controlled design value violating the 1997 8-hour ozone NAAQS at any monitor. If determined necessary, the adoption of rules for ensuring attainment and maintenance of the 8-hour ozone NAAQS will begin. Within eighteen to twenty-four months of the monitored violation ADEM will implement the appropriate contingency measures needed to assure future attainment of the ozone NAAQS.

In addition to at least one contingency measure being implemented upon a violation, pursuant to Section 175A (d), all control measures in place prior to redesignation to attainment will remain in place. Alabama's commitment to implement these programs as expeditiously as possible is outlined below.

3.5.2 Contingency Measures

- *NOx RACT*

  The Acid Rain program, the NOx SIP Call, the Clean Air Interstate Rule (CAIR), the Cross State Air Pollution Rule (CSAPR), and the 1997 8-hour Birmingham Attainment demonstration succeeded in requiring controls that meet RACT, and in some instances, BACT for large sources of NOx. The State would commit to investigate other smaller point sources of lower thresholds for specific controls. Rules would be implemented if further reductions in NOx were deemed appropriate based on the effectiveness of the reductions to bring the area back into attainment and the cost effectiveness of the control measures. Regulations could be expected to be implemented within 18 months of this determination.

- *VOC RACT*

  Early state plans for the control of ozone largely focused on the control of VOCs. ADEM Admin. Code Chapter 335-3-6 incorporates regulations based on documents issued by EPA known as Control Technique Guidelines or CTGs. The State would commit to investigate any CTG categories issued by EPA post 1990, for possible adoption. The

State will determine if there are any new point source categories covered by a CTG that are applicable in the Birmingham maintenance area. A comparison would be made to any corresponding New Source Performance Standards (NSPS) to determine if the NSPS is more stringent than the CTG and if the particular source category is already covered by the NSPS. Rules would be implemented if further reductions in VOCs were deemed appropriate based on the effectiveness of the reductions to bring the area back into attainment and the cost effectiveness of the control measures. Regulations could be expected to be implemented within 18 months of this determination.

A timeline for the development of NOx and/or VOC regulations follows:

1. Identify potential stationary sources for reductions	3 months
2. Identify applicable RACT	3 months
3. Initiate a stakeholder process	3 months
4. Draft SIP regulations	3 months
5. Initiate rulemaking process (including public comment period, hearing, Commission adoption and final submission to EPA)	6 months
Completion no later than:	18 months

- *Prioritization of Funding for Diesel Emissions Reduction Projects in the Birmingham Area*

  In the event that monitoring data in the maintenance area indicates a violation of the 1997 ozone NAAQS, ADEM will prioritize diesel retrofit and replacement projects in the Birmingham area for funding from the existing state clean diesel program.

Other control measures not included in the above list will be considered if new control programs are deemed more effective for this area.

3.6 Conformity Determination

The transportation and general conformity rules apply to nonattainment areas and maintenance areas operating under maintenance plans. Transportation conformity determinations are required in nonattainment and maintenance areas whenever the State Transportation Improvement Program is revised or a metropolitan planning organization revises their Long Range Transportation Plan. General conformity determinations are required whenever there is a federal action, other than transportation related, within a nonattainment or maintenance area that will increase emissions above a de minimis level. In a traditional maintenance plan, emission budgets are established explicitly for transportation conformity by means of motor vehicle emission budgets and implicitly for general conformity where the estimated emissions in the SIP that reflect the federal action being considered becomes the emission budget that must be met.

Emissions budgets in limited maintenance plan areas may be treated as non-constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the 1997 8-hour ozone NAAQS would result. For general conformity determinations, this means that emission estimates for federal actions, other than transportation related, would no longer need to be compared to the SIP since the limited maintenance plan would be considered to satisfy the required budget test.

For transportation conformity determinations, it would be unreasonable to expect the area to experience so much growth in vehicle emissions during the limited maintenance plan period that a violation of the 1997 8-hour ozone NAAQS would occur. As a result, federal actions requiring transportation conformity determinations under the transportation conformity rule are considered to satisfy the budget test without the need for a regional emissions analysis. Therefore, motor vehicle emission budgets are not established in a limited maintenance plan.

Approval of the limited maintenance plan does not relieve transportation partners of the other transportation conformity requirements. Transportation plan revisions and transportation improvement program conformity determinations must satisfy all other applicable requirements of the transportation conformity rule and hot-spot requirements must be satisfied for transportation projects (40 CFR 93.109(e)).

The ozone maintenance period is through 2026 for the Birmingham 1997 8-hour ozone maintenance area.

4.0 CONCLUSION

ADEM proposes that the Birmingham 1997 8-hour ozone maintenance area meets the requirements for a limited maintenance plan. The Birmingham area is currently 79% of the exceedance level for the 1997 8-hour ozone standard with a regional design value of 67 ppb. An attainment inventory for 2014 has been provided, as well as contingency measures in the event that the Birmingham area should violate the standard in the future. Finally, ADEM has committed to continue operating ozone monitors in the Birmingham maintenance area in accordance with 40 CFR Part 58.

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Appendix A

Guidance Memorandum

for

Ozone Limited Maintenance Plan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

NOV 16 1994

MEMORANDUM

SUBJECT: Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas

FROM: Sally L. Shaver, Director
Air Quality Strategies & Standards Division (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Purpose

This memorandum sets forth new guidance on maintenance plan requirements for certain nonclassifiable ozone nonattainment areas seeking redesignation to attainment. In particular, nonclassifiable ozone areas whose design values are at or below 0.106 ppm (85 percent of exceedance levels of the ozone NAAQS) at the time of redesignation may choose to submit a less rigorous maintenance plan than was formerly required. This new option is being termed a limited maintenance plan. Nonclassifiable ozone areas with design values greater than 0.106 ppm will continue to be subject to full maintenance plan requirements described in the September 4, 1992 memorandum, "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Calcagni, former Director of the OAQPS Air Quality Management Division to the Regional Air Division Directors.

There are three types of nonclassifiable ozone areas: submarginal, transitional, and incomplete/no data. A description of these areas is included as Attachment A.

II. Background

Section 107(d)(3)(E) of the Act provides that a nonattainment area can be redesignated to attainment if the following criteria are met:

1. The EPA has determined that the NAAQS for the applicable pollutant has been attained.

2. The applicable implementation plan has been fully adopted under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Section 175A of the Act provides the general framework for maintenance plans. The maintenance plan must provide for maintenance of the NAAQS for at least 10 years after redesignation,[1] including any additional control measures as may be necessary to ensure such maintenance. In addition, maintenance plans are to contain such contingency provisions as EPA deems necessary to assure the prompt correction of a violation of the NAAQS that occurs after redesignation. The contingency measures must include, at a minimum, a requirement that the State will implement all control measures contained in the nonattainment SIP prior to redesignation.

Beyond these requirements, however, section 175A does not define the content of a maintenance plan. Thus, EPA has the authority to exercise reasonable discretion to determine those requirements. The EPA has previously issued guidance on meeting all five criteria for redesignation including maintenance plans (see Attachment B). The EPA now believes that it is justifiable and appropriate to apply a different set of maintenance plan requirements (described herein) to a limited category of ozone nonattainment areas--nonclassifiable areas whose monitored air quality is equal to or less than 85 percent of exceedance levels of the ozone NAAQS. The EPA does not believe that the full maintenance plan requirements need be applied to these areas because they have achieved air quality levels well below the

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[1]Section 175A also requires that 8 years after redesignation, the State must submit an additional plan to provide for maintenance for a second follow-on 10-year period.

standard without the application of control measures required by the Act for classified ozone nonattainment areas. Also, these areas do not have either a recent history of monitored violation of the ozone NAAQS or a long prior history of monitored air quality problems. The EPA believes that the continued applicability of prevention of significant deterioration (PSD) requirements, any control measures already in the SIP, and Federal measures (such as the Federal motor vehicle control program) should provide adequate assurance of maintenance for these areas.

III. Qualifying for the Limited Maintenance Plan Option

To qualify for the limited maintenance plan option, the ozone design value for the area, based on the 3 years of data used to demonstrate attainment, must be at or below 0.106 ppm (85 percent of exceedance levels of the ozone NAAQS). Additionally, the design value for the area must continue to be at or below 0.106 ppm until the time of final EPA action on the redesignation. The method for calculating design values is presented in the June 18, 1990 memorandum, "Ozone and Carbon Monoxide Design Value Calculations," from William G. Laxton, former Director of the OAQPS Technical Support Division to Regional Air Directors. The memorandum focuses primarily on determining design values for nonattainment areas in order to classify the areas as marginal, moderate, serious, severe, or extreme. Therefore, the document discusses determining the design value for an area based on the monitors which are exceeding the standard. In the case of a nonattainment area seeking redesignation to attainment, all monitors must be meeting the standard. To assess whether a nonclassifiable area meets the applicability cutoff for the limited maintenance plan, a separate design value must be developed for every monitoring site. The highest of these design values is the design value for the whole area. If the area design value is at or below 0.106 ppm, the State may select the limited maintenance plan option for the first 10-year maintenance period. If the design value for the area exceeds 0.106 prior to final EPA action on the redesignation, the area no longer qualifies for the limited maintenance plan and must instead submit a full maintenance plan. The EPA will issue guidance in the future on the applicability of the limited maintenance plan option to the second follow-on 10-year maintenance period.

IV. Limited Maintenance Plan Elements

Following is a list of core provisions which should be included in a limited maintenance plan. Any final EPA determination regarding the adequacy of a limited maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant available information.

a. Attainment Inventory

The State should develop an attainment emissions inventory to identify a level of emissions in the area which is sufficient to attain the NAAQS. This inventory should be consistent with EPA's most recent guidance[2] on emissions inventories for nonattainment areas available at the time and should represent emissions during the time period associated with the monitoring data showing attainment. The inventory should be based on actual "typical summer day" emissions of VOC and NOx (ozone precursors). Emissions of CO are not necessary in the attainment inventory because they will not be tracked for maintenance purposes.

b. Maintenance Demonstration

The maintenance demonstration requirement is considered to be satisfied for nonclassifiable areas if the monitoring data show the area is meeting the air quality criteria discussed above. There is no requirement to project emissions over the maintenance period. The EPA believes if the area begins the maintenance period at or below 85 percent of exceedance levels, the air quality along with the continued applicability of PSD requirements, any control measures already in the SIP, and Federal measures, should provide adequate assurance of maintenance over the initial 10-year maintenance period.

When EPA approves a limited maintenance plan, EPA is concluding that an emissions budget may be treated as essentially not constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result.

c. Monitoring Network/Verification of Continued Attainment

To verify the attainment status of the area over the maintenance period, the maintenance plan should contain provisions for continued operation of an appropriate, EPA-approved air quality monitoring network, in accordance with 40 CFR part 58. This is particularly important for areas using a limited maintenance plan because there will be no cap on emissions.

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[2]The EPA's current guidance on the preparation of emissions inventories for ozone areas is contained in the following documents: "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume I" (EPA-450/4-91-016), "Emission Inventory Requirements for Ozone State Implementation Plans" (EPA-450/4-91-010), and "Procedures for Emission Inventory Preparation: Volume IV, Mobile Sources" (EPA-450/4-81-026d).

d. Contingency Plan

Section 175A of the Act requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area. These contingency measures do not have to be fully adopted at the time of redesignation. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered by a specified event. The contingency plan should identify the measures to be promptly adopted and provide a schedule and procedure for adoption and implementation of the measures. The State should also identify specific indicators, or triggers, which will be used to determine when the contingency measures need to be implemented. While a violation of the NAAQS is an acceptable trigger, States may wish to choose a pre-violation action level as a trigger, such as an exceedance of the NAAQS. By taking early action, a State may be able to prevent any actual violation of the NAAQS and, therefore, eliminate any need on the part of EPA to redesignate an area back to nonattainment.

V. Conformity Determinations Under Limited Maintenance Plans

The transportation conformity rule (58 FR 62188; November 24, 1993) and the general conformity rule (58 FR 63214; November 30, 1993) apply to nonattainment areas and maintenance areas operating under maintenance plans. Under either rule, one means of demonstrating conformity of Federal actions is to indicate that expected emissions from planned actions are consistent with the emissions budget for the area. As discussed above in section IV(b), emissions budgets in limited maintenance plan areas may be treated as essentially not constraining for the length of the initial maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result. In other words, EPA would be concluding that emissions need not be capped for the maintenance period. Therefore, in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule could be considered to satisfy the "budget test" required in sections 93.118, 93.119, and 93.120 of the rule. Similarly, in these areas, Federal actions subject to the general conformity rule could be considered to satisfy the "budget test" specified in section 93.158(a)(5)(i)(A) of the rule.

For further information regarding the limited maintenance plan option for nonclassifiable ozone areas, please contact Carla Oldham at (919) 541-3347. For information regarding transportation conformity requirements, please contact Kathryn Sargeant of the Office of Mobile Sources at (313) 668-4441. For

information regarding general conformity requirements, please contact Doug Grano at (919) 541-3292.

Attachments

ATTACHMENT A

The EPA used 1987-89 as the primary data years in determining designations and classifications for ozone areas set forth in the November 6, 1991 final rule on Air Quality Designations and Classifications (56 FR 56694). Certain ozone nonattainment areas could not be classified as marginal or above under Table 1 of section 181(a)(1) of the Clean Air Act either because of incomplete monitoring data or because they were nonattainment pre-enactment but did not violate the standard during 1987-89. These areas are collectively called nonclassifiable areas. Nonclassifiable ozone areas consist of transitional, submarginal, and incomplete/no data areas.

Transitional areas

An area is considered transitional under section 185A if it was designated nonattainment both prior to enactment and at the time of enactment, and did not violate the primary NAAQS for ozone over the 3-year period from 1987-1989.

Section 185A of the Act required EPA to make a determination, by June 30, 1992, whether the designated transitional areas had continued to meet the ozone NAAQS through December 31, 1991. All 12 transitional areas were attaining the NAAQS through December 31, 1991 and none are known to have violated the standard since. In May and June of 1992, Regional Administrators sent letters to Governors of States with transitional areas notifying them of EPA's determination.

Submarginal areas

Compliance with the ozone NAAQS is determined on the basis of expected exceedances which include an adjustment for missing data.[1] The submarginal category includes areas that violated the ozone NAAQS during 1987-89 but had a design value for the period of less than .121 ppm (the lower limit for marginal areas) due to the adjustment for missing data when calculating expected exceedances. Presently, there are no submarginal areas.

Incomplete/no data areas

Certain ozone areas designated nonattainment prior to enactment and at enactment did not have sufficient air quality monitoring data to determine whether they were or were not violating the NAAQS. These areas are termed incomplete/no data areas. These include areas which do not have monitors. Currently, there are 47 incomplete/no data areas.

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[1]This adjustment procedure is described in 40 CFR part 50.9, appendix H.

ATTACHMENT B

The EPA policies for implementing sections 107 and 175A of the Act for redesignations are contained in the following memorandums.

1. "Procedures for Processing Requests to Redesignate Areas to Attainment," John Calcagni, Director, Air Quality Management Division, September 4, 1992.

2. "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992," Michael Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993.

3. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," John Calcagni, Director, Air Quality Management Division, October 28, 1992.

4. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992.

5. "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (57 FR 13498; April 16, 1992).

Proposed Revisions

to the

Alabama Department of

Environmental Management's

Administrative Code for Division 3 (Air Division)

Post Adoption Submittal

Public Hearing: November 9, 2011
Adopted: December 9, 2011

(Proposed Revisions for Chapter 335-3-1, -5, and -8 of the ADEM Administrative Code)

TABLE OF CONTENTS

Part A -

Resolution Signed by the Commission of the Alabama Department of Environmental Management

ENVIRONMENTAL MANAGEMENT COMMISSION
RESOLUTION

WHEREAS, the Alabama Department of Environmental Management gave notice of a public hearing on the proposed revisions to ADEM Admin. Code 335-3 of the Department's Air Division – Air Pollution Control Program Rules in accordance with Ala. Code § 22-22A-8 (2006 Rplc. Vol.) and Ala. Code § 41-22-4 (2000 Rplc. Vol.); and

WHEREAS, a public hearing was held before a representative of the Alabama Department of Environmental Management designated by the Environmental Management Commission for the purpose of receiving data, views and arguments on the amendment of such proposed rules; and

WHEREAS, the Alabama Department of Environmental Management did not receive any written or oral comments at the public hearing or during the public comment period.

NOW THEREFORE, pursuant to Ala. Code. §§ 22-22A-5, 22-22A-6, 22-22A-8 (2006 Rplc. Vol.), and Ala. Code. § 41-22-5 (2000 Rplc. Vol.), as duly appointed members of the Environmental Management Commission, we do hereby adopt and promulgate these revisions to division 335-3 [rules 335-3-1-.14/Emissions Reporting, Requirements Relating to Budgets for NOx Emissions (Repeal); 335-3-1-.16/ Emissions Reporting, Requirements Relating to Budgets for SO_2 and NOx Emissions (Repeal); 335-3-5-.06/State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions (Repeal); 335-3-5-.07/CAIR Designated Representative for CAIR SO_2 Sources (Repeal); 335-3-5-.08/Permits (Repeal); 335-3-5-.11/CAIR SO_2 Allowance Tracking System (Repeal); 335-3-5-.12/CAIR SO_2 Allowance Transfers (Repeal); 335-3-5-.13/Monitoring and Reporting (Repeal); 335-3-5-.14/CAIR SO_2 Opt-In Units (Repeal); 335-3-8-.05/NO_X Budget Trading Program (Repeal); 335-3-8-.06/Authorized Account Representative for NOx Budget Sources (Repeal); 335-3-8-.07/Permits (Repeal); 335-3-8-.08/Compliance Certification (Repeal); 335-3-8-.09/NOx Allowance Allocations (Repeal); 335-3-8-.10/NO_X Allowance Tracking System (Repeal); 335-3-8-.11/NO_X Allowance Transfers (Repeal);

335-3-8-.12/Monitoring and Reporting (Repeal); 335-3-8-.13/Individual Unit Opt Ins (Repeal); 335-3-8-.14/New Combustion Sources (Repeal/New); 335-3-8-.15/Standards for New Combined Cycle Electric Generating Units (Repeal/New); 335-3-8-.16/CAIR NOx Annual Trading Program (Repeal); 335-3-8-.17/CAIR Designated Representative for CAIR NOx Sources (Repeal); 335-3-8-.18/CAIR Permits (Repeal); 335-3-8-.20/CAIR NOx Allowance Allocations (Repeal); 335-3-8-.21/CAIR NOx Allowance Tracking System (Repeal); 335-3-8-.22/CAIR NOx Allowance Transfers (Repeal); 335-3-8-.23/CAIR Monitoring and Reporting (Repeal); 335-3-8-.24/CAIR NOx Opt-in Units (Repeal); 335-3-8-.25/CAIR NOx Ozone Season Trading Program (Repeal); 335-3-8-.26/CAIR Designated Representative for CAIR NOx Ozone Season Sources (Repeal); 335-3-8-.27/CAIR NOx Ozone Season Permits (Repeal); 335-3-8-.29/CAIR NOx Ozone Season Allowance Allocations (Repeal); 335-3-8-.30/CAIR NOx Ozone Season Allowance Tracking System (Repeal); 335-3-8-.31/CAIR NOx Ozone Season Allowance Transfers (Repeal); 335-3-8-.32/CAIR NOx Ozone Season Monitoring and Reporting (Repeal); 335-3-8-.33/CAIR NOx Ozone Season Opt-in Units (Repeal)] of the Department's Air Division – Air Pollution Control Program rules, administrative code attached hereto, to become effective thirty-five days, unless otherwise indicated, after filing with the Alabama Legislative Reference Service.

ENVIRONMENTAL MANAGEMENT COMMISSION
RESOLUTION

ADEM Admin. Code division 335-3 - Air Pollution Control Program

IN WITNESS WHEREOF, we have affixed our signatures below on this 9th day of December 2011.

APPROVED:

DISAPPROVED:

ABSTAINED:

This is to certify that this Resolution is a true and accurate account of the actions taken by the Environmental Management Commission on this 9th day of December 2011.

John H. Lester, Chair
Environmental Management Commission
Certified this 9th day of December 2011

Part B -

Legal Notice
Proof of Publication of Legal Notice
Proof of Public Hearing

Geraldine H
Air

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
350
NOTICE OF PUBLIC HEARING
FOR PROPOSED REVISIONS TO DIVISION 3
ADEM ADMINISTRATIVE CODE

Rule	Title
335-3-1-.14	Emissions Reporting Requirements Relating to Budgets for NO_x Emissions
335-3-1-.16	Emissions Reporting Requirements Relating to Budgets for SO_2 and NO_x Emissions
335-3-5-.06	State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions
335-3-5-.07	CAIR Designated Representative for CAIR SO_2 Sources
335-3-5-.08	Permits
335-3-5-.11	CAIR SO_2 Allowance Tracking System
335-3-5-.12	CAIR SO_2 Allowance Transfers
335-3-5-.13	Monitoring and Reporting
335-3-5-.14	CAIR SO_2 Opt-In Units
Chapter 335-3-8	Control of Nitrogen Oxide Emissions

Notice is hereby given that a hearing before the Department of Environmental Management of the State of Alabama will be held on November 9, 2011, at 10:00 a.m. in the Main Hearing Room at the ADEM – Central Office location at 1400 Coliseum Blvd. in Montgomery, to consider proposed revisions to Division 3 of the ADEM Administrative Code.

The Alabama Department of Environmental Management proposes to amend ADEM Administrative Code Rules 335-3-1-.14, 335-3-1-.16, 335-3-5-.06, 335-3-5-.07, 335-3-5-.08, 335-3-5-.11, 335-3-5-.12, 335-3-5-.13, 335-3-5-.14, 335-3-8-.05, 335-3-8-.06, 335-3-8-.07, 335-3-8-.08, 335-3-8-.09, 335-3-8-.10, 335-3-8-.11, 335-3-8-.12, 335-3-8-.13, 335-3-8-.14, 335-3-8-.15, 335-3-8-.16, 335-3-8-.17, 335-3-8-.18, 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, 335-3-8-.23, 335-3-8-.24, 335-3-8-.25, 335-3-8-.26, 335-3-8-.27, 335-3-8-.29, 335-3-8-.30, 335-3-8-.31, 335-3-8-.32, and 335-3-8-.33. Revisions to the Division 3 Code are being proposed to delete rules related to the Federal Clean Air Interstate Rules (CAIR) and NO_x Budget Trading program.

Copies of the proposed rules and Federal Registers are available at a cost of 30 cents per page at each of the office locations listed below. The summary of reasons supporting the revisions are available free of charge. Copies of the proposed rules, the summary of reasons, and the federal registers can also be found on the Internet at www.adem.state.al.us/PubHearings/PubHearings.htm at no cost.

ADEM, Office of General Counsel
Attn: Molly Tatum
1400 Coliseum Boulevard
(P. O. Box 301463, Zip code 36130-1463)
Montgomery, AL 36110-2059
(334) 394-4360

ADEM, Birmingham Field Office
Attn: Sheila Vail
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168

ADEM, Decatur Field Office
Attn: Jan Childers
2715 Sandlin Road, SW
Decatur, AL 35603-1333
(256) 353-1713

ADEM, Mobile Field Office
Attn: Jenika Monroe
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400

Southeast Alabama Regional Planning &
Development Commission
462 North Oates, 4th Floor
Dothan, AL 36303

Alabama - Tombigbee Rivers Planning &
Development Commission
Courthouse Annex
107 Broad Street
Camden, AL 36726

East Alabama Regional Planning &
Development Commission
1130 Quintard Avenue
Anniston, AL 36201

The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. Attendance at the hearing is not necessary to present such data, views, arguments, or comments as the same may be submitted in writing, but must be received by the Hearing Officer prior to 5:00 p.m. on November 10, 2011.

Written submissions and other inquires should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2059) or by e-mail at Hearing.officer@adem.state.al.us.

Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits and Services Division at (334) 271-7714 at least five working days prior to the hearing.

This notice is hereby given this September 25, 2011, by authority of ADEM.

Marilyn Elliott

Lance R. LeFleur
Director

Shannon
DIV 3

Everything Alabama

BEST LOCAL CLASSIFIEDS

AD TEXT

Legals

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT 350 NOTICE OF PUBLIC HEARING FOR PROPOSED REVISIONS TO DIVISION 3 ADEM ADMINISTRATIVE CODE Rule Title 335-3-1-.14 Emissions Reporting Re- quirements Relating to Budgets for NOx Emissions 335-3-1-.16 Emissions Reporting Re- quirements Relating to Budgets for SO2 and NOx Emissions 335-3-5-.06 State Clean Air Interstate Rule (CAIR) SO2 Trading Program General Provisions 335-3-5-.07 CAIR Designated Representa- tive for CAIR SO2 Sources 335-3-5-.08 Permits 335-3-5-.11 CAIR SO2 Allowance Tracking System 335-3-5-.12 CAIR SO2 Allowance Trans- fers 335-3-5-.13 Monitoring and Reporting 335-3-5-.14 CAIR SO2 Opt-In Units Chapter 335-3-8 Control of Nitrogen Oxide Emissions Notice is hereby given that a hearing be- fore the Department of Environmental Man- agement of the State of Alabama will be held on November 9, 2011, at 10:00 a.m. in the Main Hearing Room at the ADEM - Cen- tral Office location at 1400 Coliseum Blvd. in Montgomery, to consider proposed revisions to Division 3 of the ADEM Administrative Code. The Alabama Department of Environ- mental Management proposes to amend ADEM Administrative Code Rules 335-3-1- .14, 335-3-1-.16, 335-3-5-.06, 335-3-5-.07, 335-3-5-.08, 335-3-5-.11, 335-3-5-.12, 335-3- 5-.13, 335-3-5-.14, 335-3-8-.05, 335-3-8-.06, 335-3-8-.07, 335-3-8-.08, 335-3-8-.09, 335-3- 8-.10, 335-3-8-.11, 335-3-8-.12, 335-3-8-.13, 335-3-8-.14, 335-3-8-.15, 335-3-8-.16, 335-3- 8-.17, 335-3-8-.18, 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, 335-3-8-.23, 335-3-8-.24, 335-3- 8-.25, 335-3-8-.26, 335-3-8-.27, 335-3-8-.29, 335-3-8-.30, 335-3-8-.31, 335-3-8-.32, and 335-3-8-.33. Revisions to the Division 3 Code are being proposed to delete rules re- lated to the Federal Clean Air Interstate Rules (CAIR) and NOx Budget Trading pro- gram. Copies of the proposed rules and Federal Registers are available at a cost of 30 cents per page at each of the office locations listed below. The summary of reasons sup- porting the revisions are available free of charge. Copies of the proposed rules, the summary of reasons, and the federal regis- ters can also be found on the Internet at www.adem.state.al.us/PubHearings/PubHe arings.htm at no cost. ADEM, Office of General Counsel Attn: Molly Tatum 1400 Coliseum Boulevard (P. O. Box 30l463, Zip code 36l30-l463) Montgomery, AL 36110-2059 (334) 394-4360 ADEM, Birmingham Field Office Attn: Sheila Vail 110 Vulcan Road Birmingham, AL 35209-4702 (205) 942-6168 ADEM, Decatur Field Office Attn: Jan Childers 2715 Sandlin Road, SW Decatur, AL 35603-1333 (256) 353-1713 ADEM, Mobile Field Office Attn: Jenika Monroe 2204 Perimeter Road Mobile, AL 36615-1131 (251) 450-3400 Southeast Alabama Regional Planning & Development Commission 462 North Oates, 4th Floor Dothan, AL 36303 Alabama - Tombigbee Rivers Planning & Development Commission Courthouse Annex 107 Broad Street Camden, AL 36726 East Alabama Regional Planning & Development Commission 1130 Quintard Avenue Anniston, AL 36201 The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. At- tendance at the hearing is not necessary to present such data, views, arguments, or comments as the same may be submitted in writing, but must be received by the Hearing Officer prior to 5:00 p.m. on November 10, 2011. Written submissions and other inquires should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Depart- ment of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2059) or by e-mail at

Hearing.officer@adem.state.al.us. Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits and Services Division at (334) 271-7714 at least five working days prior to the hearing. This notice is hereby given this September 25, 2011, by authority of ADEM. Lance R. LeFleur Director Bham News: September 25, 2011

Related Categories: Notices and Announcements - Legal Notice

Published in *The Birmingham News* 9/25. Updated 9/25.

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AD TEXT

Environmental Notices

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT 350 NOTICE OF PUBLIC HEARING FOR PROPOSED REVISIONS TO DIVISION 3 ADEM ADMINISTRATIVE CODE Rule Title 335-3-1-.14 Emissions Reporting Requirements Relating to Budgets for NOx Emissions 335-3-1-.16 Emissions Reporting Requirements Relating to Budgets for SO2 and NOx Emissions 335-3-5-.06 State Clean Air Interstate Rule (CAIR) SO2 Trading Program General Provisions 335-3-5-.07 CAIR Designated Representative for CAIR SO2 Sources 335-3-5-.08 Permits 335-3-5-.11 CAIR SO2 Allowance Tracking System 335-3-5-.12 CAIR SO2 Allowance Transfers 335-3-5-.13 Monitoring and Reporting 335-3-5-.14 CAIR SO2 Opt-In Units Chapter 335-3-8 Control of Nitrogen Oxide Emissions Notice is hereby given that a hearing before the Department of Environmental Management of the State of Alabama will be held on November 9, 2011, at 10:00 a.m. in the Main Hearing Room at the ADEM - Central Office location at 1400 Coliseum Blvd. in Montgomery, to consider proposed revisions to Division 3 of the ADEM Administrative Code. The Alabama Department of Environmental Management proposes to amend ADEM Administrative Code Rules 335-3-1-.14, 335-3-1-.16, 335-3-5-.06, 335-3-5-.07, 335-3-5-.08, 335-3-5-.11, 335-3-5-.12, 335-3-5-.13, 335-3-5-.14, 335-3-8-.05, 335-3-8-.06, 335-3-8-.07, 335-3-8-.08, 335-3-8-.09, 335-3-8-.10, 335-3-8-.11, 335-3-8-.12, 335-3-8-.13, 335-3-8-.14, 335-3-8-.15, 335-3-8-.16, 335-3-8-.17, 335-3-8-.18, 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, 335-3-8-.23, 335-3-8-.24, 335-3-8-.25, 335-3-8-.26, 335-3-8-.27, 335-3-8-.29, 335-3-8-.30, 335-3-8-.31, 335-3-8-.32, and 335-3-8-.33. Revisions to the Division 3 Code are being proposed to delete rules related to the Federal Clean Air Interstate Rules (CAIR) and NOx Budget Trading program. Copies of the proposed rules and Federal Registers are available at a cost of 30 cents per page at each of the office locations listed below. The summary of reasons supporting the revisions are available free of charge. Copies of the proposed rules, the summary of reasons, and the federal registers can also be found on the Internet at www.adem.state.al.us/PubHearings/PubHearings.htm at no cost. ADEM, Office of General Counsel Attn: Molly Tatum 1400 Coliseum Boulevard (P. O. Box 301463, Zip code 36130-1463) Montgomery, AL 36110-2059 (334) 394-4360 ADEM, Birmingham Field Office Attn: Sheila Vail 110 Vulcan Road Birmingham, AL 35209-4702 (205) 942-6168 ADEM, Decatur Field Office Attn: Jan Childers 2715 Sandlin Road, SW Decatur, AL 35603-1333 (256) 353-1713 ADEM, Mobile Field Office Attn: Jenika Monroe 2204 Perimeter Road Mobile, AL 36615-1131 (251) 450-3400 Southeast Alabama Regional Planning & Development Commission 462 North Oates, 4th Floor Dothan, AL 36303 Alabama - Tombigbee Rivers Planning & Development Commission Courthouse Annex 107 Broad Street Camden, AL 36726 East Alabama Regional Planning & Development Commission 1130 Quintard Avenue Anniston, AL 36201 The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. Attendance at the hearing is not necessary to present such data, views, arguments, or comments as the same may be submitted in writing, but must be received by the Hearing Officer prior to 5:00 p.m. on November 10, 2011. Written submissions and other inquires should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2059) or by e-mail at

Hearing.officer@adem.state.al.us. Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits and Services Division at (334) 271-7714 at least five working days prior to the hearing. This notice is hereby given this September 25, 2011, by authority of ADEM. Lance R. LeFleur Director PRESS REGISTER SEPT. 25, 2011

Related Categories: Notices and Announcements - Legal Notice

Published in *The Press-Register/Mississippi Press* 9/25. Updated 9/25.

Hunts Times
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Everything Alabama

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AD TEXT

Legal

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Hearing.officer@adem.state.al.us. Any person wishing to participate in this hearing who needs special accommodations should contact the Department'sPermits and Services Division at (334) 271-7714 at least five working days prior to the hearing. This notice is hereby given this September 25, 2011, by authority of ADEM. Lance R. LeFleur Director Sept. 25, 2011

Related Categories: Notices and Announcements - Legal Notice

Published in *The Huntsville Times* 9/25. Updated 9/25.

Exhibit C-4

Mobile DIV. 3

Montgomery Advertiser

TO: ADEM PERMITS & SERVICES
PO BO 301463
MONTGOMERY, AL 36130

Daily-Montgomery, Montgomery County, AL

PROOF OF PUBLICATION

State of Alabama

County of Montgomery:

Before the undersigned authority personally appeared Linda Scott who on oath, says that she is a personal representative of the *Montgomery Advertiser*, a daily newspaper published in Montgomery, Alabama; that the attached copy of advertisement, being a Legal in the matter of:

Ad Number: 934234 **ALABAMADEPARTMENTOFE**

Was published in said newspaper in the issue(s) of:

9/25/2011

Affiant further says that the said *Montgomery Advertiser* is a newspaper published in said Montgomery County, Alabama, and that the said newspaper has heretofore been published in said Montgomery County, Alabama, and has been entered as second class matter at the Post Office in said Montgomery County, Alabama, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Now due on said account is $ **579.37**

Sworn to and subscribed before me this 28th day of Sept 2011
by Linda Scott who is personally known to me.

Linda Scott Affiant

Notary Public

My Commission Expires August 14, 2013

Exhibit C-4

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
880
NOTICE OF PUBLIC HEARING
FOR PROPOSED REVISIONS TO DIVISION 3 ADEM ADMINISTRATIVE CODE

Rule Title
335-3-1-.14 Emissions Reporting Requirements Relating to Budgets for NOx Emissions
335-3-1-.16 Emissions Reporting Requirements Relating to Budgets for SO2 and NOx Emissions

335-3-5-.06 State Clean Air Interstate Rule (CAIR) SO2 Trading Program General Provisions
335-3-5-.07 CAIR Designated Representative for CAIR SO2 Sources
335-3-5-.08 Permits
335-3-5-.11 CAIR SO2 Allowance Tracking System
335-3-5-.12 CAIR SO2 Allowance Transfers
335-3-5-.13 Monitoring and Reporting
335-3-5-.14 CAIR SO2 Opt-in Units

Chapter 335-3-8 Control of Nitrogen Oxide Emissions

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The Alabama Department of Environmental Management proposes to amend ADEM Administrative Code Rules 335-3-1-.14, 335-3-1-.16, 335-3-5-.06, 335-3-5-.07, 335-3-5-.08, 335-3-5-.11, 335-3-5-.12, 335-3-5-.13, 335-3-5-.14, 335-3-8-.05, 335-3-8-.06, 335-3-8-.07, 335-3-8-.08, 335-3-8-.09, 335-3-8-.10, 335-3-8-.11, 335-3-8-.12, 335-3-8-.13, 335-3-8-.14, 335-3-8-.15, 335-3-8-.16, 335-3-8-.17, 335-3-8-.18, 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, 335-3-8-.23, 335-3-8-.24, 335-3-8-.25, 335-3-8-.26, 335-3-8-.27, 335-3-8-.29, 335-3-8-.30, 335-3-8-.31, 335-3-8-.32, and 335-3-8-.33. Revisions to the Division 3 Code are being proposed to delete rules related to the Federal Clean Air Interstate Rules (CAIR) and NOx Budget Trading program.

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ADEM, Office of General Counsel
Attn: Molly Tatum
1400 Coliseum Boulevard
(P. O. Box 301463, Zip code 36130-1463)
Montgomery, AL 36110-2059
(334) 394-4360

ADEM, Birmingham Field Office
Attn: Sheila Vail
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168

ADEM, Decatur Field Office
Attn: Jan Childers
2715 Sandlin Road, SW
Decatur, AL 35603-1333
(256) 353-1713

ADEM, Mobile Field Office
Attn: Jenika Monroe
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400

Southeast Alabama Regional Planning & Development Commission
462 North Oates, 4th Floor
Dothan, AL 36303

Alabama - Tombigbee Rivers Planning & Development Commission
Courthouse Annex
107 Broad Street
Camden, AL 36726

East Alabama Regional Planning & Development Commission
1130 Quintard Avenue
Anniston, AL 36201

The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. Attendance at the hearing is not necessary to present such data, views, arguments, or comments as the same may be submitted in writing, but must be received by the Hearing Officer prior to 5:00 p.m. on November 10, 2011.

Written submissions and other inquiries should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2059) or by e-mail at Hearing-officer@adem.state.al.us.

Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits and Services Division at (334) 271-7714 at least five working days prior to the hearing.

This notice is hereby given this September 15, 2011 by authority of ADEM.

Lance R. LeFleur
Director

Mont. Adv. 9/25/11

934234

Advanced Notice of Proposed Rulemaking **Exhibit C-5**
ADEM Administrative Code 335-3
September 23, 2011

1. Cagley, A. Michelle
2. A Stewart
3. actrgt@bellsouth.net
4. Adella Ashton
5. Glass David A
6. Mindy Newell
7. townhall@cherokeetel.net
8. townofrepton@frontiernet.net
9. Gillespie, Alan A.
10. Aliceville Water and Sewer Board
11. Allen Hammack
12. Allison Dellamaggiora
13. Amanda Sisel
14. Starling, Mickey Mr
15. Andy Kennedy
16. Annette Whaley
17. Fisher, Anthony
18. Marino, Anthony J.
19. Phillips, Anthony
20. Arleen Alexander
21. Ashley Cousins
22. Becky Larson
23. Bennett Bearden
24. Roddy, Bill G.
25. Birmingham News
26. Bob Gunn
27. Bob Harris
28. Bobbie Knight
29. Bonnie Jenkins
30. Brenda Gay
31. Brian Debrow
32. Brian Love
33. Casey Frederick
34. Cecil Hopper
35. Charles Driggars
36. Chris V. Isaacson
37. Chuck Hamilton
38. Cindy Split
39. City of Gulf Shores
40. City of Guntersville
41. Clayton Smith
42. Dailey Nancy
43. Dan O'Donnell
44. Bradford, Danny R
45. Danny Seaver
46. Shea, Danny
47. Gregory, Darlene
48. Dave Warren
49. David Brentzel
50. David Ludder
51. David Pool
52. David Roth
53. David Yeager
54. Deborah Jones
55. Dennis Lathem
56. Dewberry Water
57. Diane Goggins
58. Dianne McGee
59. Dixie Bray
60. Donna Llewellyn
61. Doris Reel
62. Doug Carothers
63. Cote, Doug
64. Fincher, Ed
65. Erin Brandt
66. Mike Schmidt
67. Floyd Gilliland
68. Frank Horton
69. Gail Perna
70. Gary Huffman
71. George Hays
72. Kustos, George P.
73. Goodloe Sutton, Sr.
74. Greg Leatherbury
75. (gsuwtp@yahoo.com)
76. Hal Wiedeman
77. Harmon Engineering
78. Harold Clark
79. Harris Hurst
80. Heflin Water
81. I Ely
82. J Rester
83. Jackie Widener
84. Jacob D. Craft
85. Jacob A. Taylor
86. Jaime Lopez
87. Allen, James H.
88. James Jerry Wood
89. James Stewart
90. Janene Sauce
91. Janiece Rydell
92. Helton, Janis
93. Jarry Taylor
94. Zerkle, Jeffrey L
95. Jennifer Szarek
96. Jenny Dorgan
97. Pike, Jerry
98. Jerry Samford
99. Jim Breedlove
100. Jim Butler
101. DeLano, Jim
102. Jim Miller
103. Jimmy Cochran
104. Joanne Boyd
105. Joe Eichelberg
106. Joe Harman
107. John Burton
108. Davis, John
109. John Dendy
110. John Hoertz
111. John Naron

Exhibit C-5

112. John L. Wathen
113. Judy Sekora
114. Tolbert, Karmen
115. Katherine Bouma
116. Ken Roy
117. Kent Corporation
118. Kerry Whipple Bean
119. Kevin Pendergrass
120. Kim McDonald Witter
121. Kirk Kreamer
122. Kristie Wolverton
123. lwcross@upsfreight.com
124. Laura Lawley
125. Booth, Leann
126. Leonard Evans
127. LeRoy Bishop
128. Leslie Filbey
129. Lynn Kirkland
130. M Renfro
131. Phillips, Mandy
132. Ingram, Margaret
133. Marianne Busbee
134. Ladd Account
135. Farmer, Mark
136. Mark Hall
137. Mark E. Hedspeth
138. Mark Huber
139. Marsha Yates
140. Marvin Gregory
141. Mary Smith
142. Mayor Bill Ham
143. Mayor Clemmie E. Leiws
144. Mel Monk
145. Michael Hines
146. Eubanks, Michael J SAM
147. Michael Wassell
148. Rakes, Mike R
149. Mike Webb
150. (nstrube@co.baldwin.al.us)
151. Oil Recovery Co.
152. Oneonta Water Treatment Plant
153. Murray K. Griffin, P.E.
154. Morgan, Pat
155. Patrick Pfaltzgraff
156. Pinyan, Paul
157. Peter Prather
158. Phillip Stevenson
159. Phillips Engineering
160. Planning and Economic Development
161. Peyton, Preston
162. Cheatham, Prudence
163. R McCain
164. R. Carlisle
165. R. Hendricks
166. Boyd, Rachel
167. Nolte, Ralph A.
168. Deon Lartigue/Dr. Ralph Pfeiffer
169. Rebecca Crane
170. Richard Ash
171. Richard Brownell
172. Richard Wheaton
173. Robert Anthony
174. Robert McCarley
175. Robert Tambling
176. Robert.Pinckard@shell.com
177. Roderick K. Rickman
178. Roscell Stringer
179. Scott Stephens
180. Jennifer Self
181. Williams, SF (Sylvia)
182. Shane Davis
183. Sid Trant
184. Sonny Brasfield
185. Stacy Harper
186. Steve McDonald
187. Steve Smith
188. Steven A Black
189. Steven Feisel
190. Teresa Walley
191. Terry Hazle
192. Ryals, Thomas M.
193. Tom Guay
194. Tom Ivers
195. Tom Solomon
196. Tommy Barnes
197. Tommy Taylor
198. Toni Odom
199. Cofer, Tony
200. Tony D Owens
201. Town of Goshen
202. Travis Osborne
203. (vpaul@co.baldwin.al.us)
204. Lewis, Vanessa
205. Vic Verma
206. VTA
207. W. Bettis
208. W. Gruenloh
209. WarriorCWP Facilitator
210. William "Chip" Moore
211. Wilson,Woody
212. John W. Young
213. Herb Highfill

Exhibit C-5

From: Tatum, Molly
Sent: Friday, September 23, 2011 1:09 PM
To: Cagley, A. Michelle; A Stewart; actrgt@bellsouth.net; Adella Ashton; Glass David A Civ AFCEE/CCR-A; Mindy Newell; townhall@cherokeetel.net; townofrepton@frontiernet.net; Gillespie, Alan A.; Aliceville Water and Sewer Board (brianf257@nctv.com); Allen Hammack ; Allison Dellamaggiora ; Amanda Sisel ; Starling, Mickey Mr ; Andy Kennedy; Annette Whaley; Fisher, Anthony; Marino, Anthony J.; Phillips, Anthony Mr AMSTA-AN; Arleen Alexander; Ashley Cousins ; Becky Larson ; Bennett Bearden; Roddy, Bill G.; Birmingham News; Bob Gunn; Bob Harris; Bobbie Knight; Bonnie Jenkins; Brenda Gay ; Brian Debrow ; Brian Love; Casey Frederick; Cecil Hopper; Charles Driggars; Chris V. Isaacson; Chuck Hamilton; Cindy Split; City of Gulf Shores; City of Guntersville; Clayton Smith; Dailey Nancy; Dan O'Donnell; Bradford, Danny R; Danny Seaver; Shea, Danny; Dave Warren; David Brentzel; David Ludder; David Pool ; David Roth ; David Yeager; Deborah Jones; Dennis Lathem; Dewberry Water; Diane Goggins; Dianne McGee; Dixie Bray; Donna Llewellyn; Doris Reel; Doug Carothers; Cote, Doug; Fincher, Ed
Cc: Handsome, Geraline; Johnston, Tom
Subject: Advanced Notice of Rulemaking 335-3

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

350

NOTICE OF PUBLIC HEARING
FOR PROPOSED REVISIONS TO DIVISION 3
ADEM ADMINISTRATIVE CODE

Rule	**Title**
335-3-1-.14	Emissions Reporting Requirements Relating to Budgets for NO_x Emissions
335-3-1-.16	Emissions Reporting Requirements Relating to Budgets for SO_2 and NO_x Emissions
335-3-5-.06	State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions
335-3-5-.07	CAIR Designated Representative for CAIR SO_2 Sources
335-3-5-.08	Permits
335-3-5-.11	CAIR SO_2 Allowance Tracking System
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Exhibit C-5

Interstate Rules (CAIR) and NO_x Budget Trading program.

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Decatur, AL 35603-1333
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ADEM, Mobile Field Office
Attn: Jenika Monroe
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400

Southeast Alabama Regional Planning &
Development Commission
462 North Oates, 4th Floor
Dothan, AL 36303

Alabama - Tombigbee Rivers Planning &
Development Commission
Courthouse Annex
107 Broad Street
Camden, AL 36726

East Alabama Regional Planning &
Development Commission
1130 Quintard Avenue
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Lance R. LeFleur
Director

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From: Tatum, Molly
Sent: Friday, September 23, 2011 1:10 PM
To: Erin Brandt; Mike Schmidt; Floyd Gilliland; Frank Horton; Gail Perna; Gary Huffman; George Hays ; Kustos, George P.; Goodloe Sutton, Sr.; Greg Leatherbury; (gsuwtp@yahoo.com); Hal Wiedeman; Harmon Engineering; Harold Clark ; Harris Hurst; Heflin Water; Herb Highfill; I Ely; J Rester; Jackie Widener; Jacob D. Craft ; Jacob A. Taylor; Jaime Lopez (BMTI - San Antonio); Allen, James H.; James Jerry Wood; James Stewart; Janene Sauce; Janiece Rydell ; Helton, Janis; Jarry Taylor; Zerkle, Jeffrey L; Jennifer Szarek; Jenny Dorgan (aecjenny@gmail.com); Pike, Jerry; Jerry Samford; Jim Breedlove ; Jim Butler; DeLano, Jim; Jim Miller; Jimmy Cochran ; Joanne Boyd; Joe Eichelberg; Joe Harman; John Burton; Davis, John ; John Dendy; John Hoertz; John Naron; John L. Wathen; John Young; Judy Sekora ; Tolbert, Karmen ; Katherine Bouma; Ken Roy; Kent Corporation; Kerry Whipple Bean; Kevin Pendergrass; Kim McDonald Witter (Kimberlee.Witter@awin.com); Kirk Kreamer; Kristie Wolverton; lwcross@upsfreight.com; Laura Lawley; Booth, Leann; Leonard Evans; LeRoy Bishop; Leslie Filbey (lfilbey@schn.com); Lynn Kirkland; M Renfro; Phillips, Mandy; Ingram, Margaret; Marianne Busbee; Ladd Account; Farmer, Mark; Mark Hall; Lockheed-Martin (mark.e.hedspeth@lmco.com); Mark Huber; Marsha Yates ; Marvin Gregory ; Mary Smith; Mayor Bill Ham (gholmes@auburnalabama.org); Mayor Clemmie E. Leiws (oakgrove@charterinternet.com); Mel Monk; Michael Hines ; Eubanks, Michael J SAM; Michael Wassell; Rakes, Mike R; Mike Webb; (nstrube@co.baldwin.al.us); Oil Recovery Co.; Oneonta Water Treatment Plant (onewtp@oneontautilities.com); Murray K. Griffin, P.E.; Morgan, Pat; Patrick Pfaltzgraff; Pinyan, Paul; Peter Prather; Phillip Stevenson; Phillips Engineering; Planning and Economic Development; Peyton, Preston; Cheatham, Prudence; R McCain; R. Carlisle; R. Hendricks; Boyd, Rachel; Rachel Stricklin; Nolte, Ralph A.; Deon Lartigue/Dr. Ralph Pfeiffer; Rebecca Crane; Richard Ash; Richard Brownell ; Richard Wheaton ; Robert Anthony; Robert McCarley; Robert Tambling ; Robert.Pinckard@shell.com; Roderick K. Rickman ; Roscell Stringer; Scott Stephens ; Jennifer Self; Williams, SF (Sylvia); Shane Davis; Sid Trant; Sonny Brasfield; Stacy Harper; Steve McDonald; Steve Smith (stephen.2.smith@continental-corporation.com); Steven A Black; Steven Feisel; Teresa Walley (jeffcoatllc@jeffcoateng.com); Terry Hazle; Ryals, Thomas M.; Tom Guay; Tom Ivers; Tom Solomon; Tommy Barnes; Tommy Taylor (tommy@iwirolloffs.com); Toni Odom; Cofer, Tony; Tony D Owens; Town of Goshen; Travis Osborne; (vpaul@co.baldwin.al.us); Lewis, Vanessa; Vic Verma; VTA ; W. Bettis; W. Gruenloh; WarriorCWP Facilitator; William "Chip" Moore ; Wilson,Woody
Cc: Handsome, Geraline
Subject: Advance Notice of Rulemaking 335-3

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

350

NOTICE OF PUBLIC HEARING
FOR PROPOSED REVISIONS TO DIVISION 3
ADEM ADMINISTRATIVE CODE

Rule	Title
335-3-1-.14	Emissions Reporting Requirements Relating to Budgets for NO_x Emissions
335-3-1-.16	Emissions Reporting Requirements Relating to Budgets for SO_2 and NO_x Emissions
335-3-5-.06	State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions
335-3-5-.07	CAIR Designated Representative for CAIR SO_2 Sources
335-3-5-.08	Permits
335-3-5-.11	CAIR SO_2 Allowance Tracking System

Exhibit C-5

335-3-5-.12	CAIR SO_2 Allowance Transfers
335-3-5-.13	Monitoring and Reporting
335-3-5-.14	CAIR SO_2 Opt-In Units
Chapter 335-3-8	Control of Nitrogen Oxide Emissions

Notice is hereby given that a hearing before the Department of Environmental Management of the State of Alabama will be held on November 9, 2011, at 10:00 a.m. in the Main Hearing Room at the ADEM – Central Office location at 1400 Coliseum Blvd. in Montgomery, to consider proposed revisions to Division 3 of the ADEM Administrative Code.

The Alabama Department of Environmental Management proposes to amend ADEM Administrative Code Rules 335-3-1-.14, 335-3-1-.16, 335-3-5-.06, 335-3-5-.07, 335-3-5-.08, 335-3-5-.11, 335-3-5-.12, 335-3-5-.13, 335-3-5-.14, 335-3-8-.05, 335-3-8-.06, 335-3-8-.07, 335-3-8-.08, 335-3-8-.09, 335-3-8-.10, 335-3-8-.11, 335-3-8-.12, 335-3-8-.13, 335-3-8-.14, 335-3-8-.15, 335-3-8-.16, 335-3-8-.17, 335-3-8-.18, 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, 335-3-8-.23, 335-3-8-.24, 335-3-8-.25, 335-3-8-.26, 335-3-8-.27, 335-3-8-.29, 335-3-8-.30, 335-3-8-.31, 335-3-8-.32, and 335-3-8-.33. Revisions to the Division 3 Code are being proposed to delete rules related to the Federal Clean Air Interstate Rules (CAIR) and NO_x Budget Trading program.

Copies of the proposed rules and Federal Registers are available at a cost of 30 cents per page at each of the office locations listed below. The summary of reasons supporting the revisions are available free of charge. Copies of the proposed rules, the summary of reasons, and the federal registers can also be found on the Internet at www.adem.state.al.us/PubHearings/PubHearings.htm at no cost.

ADEM, Office of General Counsel
Attn: Molly Tatum
1400 Coliseum Boulevard
(P. O. Box 301463, Zip code 36130-1463)
Montgomery, AL 36110-2059
(334) 394-4360

ADEM, Birmingham Field Office
Attn: Sheila Vail
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168

ADEM, Decatur Field Office
Attn: Jan Childers
2715 Sandlin Road, SW
Decatur, AL 35603-1333
(256) 353-1713

ADEM, Mobile Field Office
Attn: Jenika Monroe
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400

Southeast Alabama Regional Planning &
Development Commission
462 North Oates, 4th Floor
Dothan, AL 36303

Alabama - Tombigbee Rivers Planning &

Exhibit C-5

Development Commission
Courthouse Annex
107 Broad Street
Camden, AL 36726

East Alabama Regional Planning &
Development Commission
1130 Quintard Avenue
Anniston, AL 36201

The public hearing is being held to receive data, views, and arguments from interested persons regarding the proposed rules. Attendance at the hearing is not necessary to present such data, views, arguments, or comments as the same may be submitted in writing, but must be received by the Hearing Officer prior to 5:00 p.m. on November 10, 2011.

Written submissions and other inquires should be directed to: ADEM Hearing Officer, Office of General Counsel, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, AL 36130-1463 (street address: 1400 Coliseum Boulevard, Montgomery, AL 36110-2059) or by e-mail at Hearing.officer@adem.state.al.us.

Any person wishing to participate in this hearing who needs special accommodations should contact the Department's Permits and Services Division at (334) 271-7714 at least five working days prior to the hearing.

This notice is hereby given this September 25, 2011, by authority of ADEM.

Lance R. LeFleur
Director

* * * * * * *

ALABAMA DEPARTMENT OF

ENVIRONMENTAL MANAGEMENT

DIVISION 3 RULE-MAKING
(335- 3) PUBLIC HEARING

* * * * * * * *

The rule-making hearing of the **ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMISSION MEETING** was taken before Leah M. Pouncey, Certified Court Reporter, as Commissioner, on Wednesday, November 9, 2011, commencing at approximately 9:59 a.m., at the office of the Alabama Department of Environmental Management, 1400 Coliseum Boulevard, Main Conference Room, Montgomery, Alabama.

* * * * * * * * * * * *

REPORTER'S CERTIFICATE

* * * * * * * * * * * *

STATE OF ALABAMA)

COUNTY OF CRENSHAW)

I, Leah M. Pouncey, Certified Court Reporter, and Notary Public in and for the State of Alabama at Large, do hereby certify that on November 9, 2011, I reported the aforementioned proceedings, and that the pages herein contain a true and accurate transcription of the said proceedings.

I further certify that I am neither of kin nor of counsel to the parties to said cause, nor in any manner interested in the results thereof.

This the 18th day of November, 2011.

Leah M. Pouncey

Leah M. Pouncey, ACCR 592
Certified Court Reporter,
Notary Public for the
State of Alabama

My Commission expires 3/23/14.

Part C -

Documentation of Submittal of Final Regulations to the Legislative Reference Service

STATE OF ALABAMA)
MONTGOMERY COUNTY)

Exhibit C-6

Jerry L. Bassett, being duly sworn, deposes and says:

1. That he is Director of the Legislative Reference Service and the Administrative Procedure Division.

2. That the attached "Notice of Rulemaking Hearing" (Proposed Revisions to division 335-3, ADEM Administrative Code) was given to the Chairman of the Joint Committee on Administrative Regulation Review by delivering the same to his designated agent, the Administrative Procedure Division of the Legislative Reference Service, on September 20, 2011, and was published in the Alabama Administrative Monthly (Volume XXIX, Issue 12) on September 30, 2011.

3. That one original copy of each of the attached proposed revisions to the Environmental Management Rules and Regulations [rules 335-3-1-.14/Emissions Reporting, Requirements Relating to Budgets for NOx Emissions (Repeal); 335-3-1-.16/ Emissions Reporting, Requirements Relating to Budgets for SO_2 and NOx Emissions (Repeal); 335-3-5-.06/State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions (Repeal); 335-3-5-.07/CAIR Designated Representative for CAIR SO_2 Sources (Repeal); 335-3-5-.08/Permits (Repeal); 335-3-5-.11/CAIR SO_2 Allowance Tracking System (Repeal); 335-3-5-.12/CAIR SO_2 Allowance Transfers (Repeal); 335-3-5-.13/Monitoring and Reporting (Repeal); 335-3-5-.14/CAIR SO_2 Opt-In Units (Repeal); 335-3-8-.05/NO_X Budget Trading Program (Repeal); 335-3-8-.06/Authorized Account Representative for NOx Budget Sources (Repeal); 335-3-8-.07/Permits (Repeal); 335-3-8-.08/Compliance Certification (Repeal); 335-3-8-.09/NOx Allowance Allocations (Repeal); 335-3-8-.10/NO_X Allowance Tracking System (Repeal); 335-3-8-.11/NO_X Allowance Transfers (Repeal); 335-3-8-.12/Monitoring and Reporting (Repeal); 335-3-8-.13/Individual Unit Opt Ins (Repeal); 335-3-8-.14/New Combustion Sources (Repeal/New); 335-3-8-.15/Standards for New Combined Cycle Electric Generating Units (Repeal/New); 335-3-8-.16/CAIR NOx Annual Trading Program (Repeal); 335-3-8-.17/CAIR Designated Representative for CAIR NOx Sources (Repeal); 335-3-8-.18/CAIR Permits (Repeal); 335-3-8-.20/CAIR NOx Allowance Allocations (Repeal); 335-3-8-.21/CAIR NOx Allowance Tracking System (Repeal); 335-3-8-.22/CAIR NOx Allowance Transfers (Repeal); 335-3-8-.23/CAIR Monitoring and Reporting (Repeal); 335-3-8-.24/CAIR NOx Opt-in Units (Repeal); 335-3-8-.25/CAIR NOx Ozone Season Trading Program (Repeal); 335-3-8-.26/CAIR Designated Representative for CAIR NOx Ozone Season Sources (Repeal); 335-3-8-.27/CAIR NOx Ozone

Exhibit C-6

Season Permits (Repeal); 335-3-8-.29/CAIR NOx Ozone Season Allowance Allocations (Repeal); 335-3-8-.30/CAIR NOx Ozone Season Allowance Tracking System (Repeal); 335-3-8-.31/CAIR NOx Ozone Season Allowance Transfers (Repeal); 335-3-8-.32/CAIR NOx Ozone Season Monitoring and Reporting (Repeal); 335-3-8-.33/CAIR NOx Ozone Season Opt-in Units (Repeal)], was filed with the Administrative Procedure Division of the Legislative Reference Service on September 20, 2011, and thirty-two (32) copies thereof were furnished to the Joint Committee on Administrative Regulation Review by its designated agent, the Administrative Procedure Division of the Legislative Reference Service, on September 30, 2011.

Jerry L. Bassett, Director

Sworn and subscribed to before me this 18 day of November 2011.

Notary Public

LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

CERTIFICATION OF ADMINISTRATIVE RULES
FILED WITH THE LEGISLATIVE REFERENCE SERVICE
JERRY L. BASSETT, DIRECTOR

(Pursuant to Ala. Code § 41-22-6, as amended.)

I certify that the attached are correct copies of rules as promulgated and adopted on the 9th day of December 2011, and filed with the agency secretary on the 12th day of December 2011.

AGENCY NAME: Alabama Department of Environmental Management
_ Amendment _X_ New _X_ Repeal ___Adopt by Reference (Mark appropriate space)

Rule No.: 335-3-1-.14 (Repeal)
Rule Title: Emissions Reporting Requirements Relating to Budgets for NOx Emissions

Rule No.: 335-3-1-.16 (Repeal)
Rule Title: Emissions Reporting Requirements Relating to Budgets for SO2 and NOx Emissions

Rule No.: 335-3-5-.06 (Repeal)
Rule Title: State Clean Air Interstate Rule (CAIR) SO2 Trading Program General Provisions

Rule No.: 335-3-5-.07 (Repeal)
Rule Title: CAIR Designated Representative for CAIR SO2 Sources

Rule No.: 335-3-5-.08 (Repeal)
Rule Title: Permits

Rule No.: 335-3-5-.11 (Repeal)
Rule Title: CAIR SO2 Allowance Tracking System

Rule No.: 335-3-5-.12 (Repeal)
Rule Title: CAIR SO2 Allowance Transfers

Rule No.: 335-3-5-.13 (Repeal)
Rule Title: Monitoring and Reporting

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S. W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
4171 Commanders Drive
Mobile, AL 36615-1421
(251) 432-6533
(251) 432-6598 (FAX)

Rule No.: 335-3-5-.14 (Repeal)
Rule Title: CAIR SO2 Opt-Ins Units

Rule No.: 335-3-8-.05 (Repeal) (New)
Rule Title: New Combustion Sources

Rule No.: 335-3-8-.06 (Repeal) (New)
Rule Title: Standards for New Combined-Cycle Electric Generating Units

Rule No.: 335-3-8-.07 (Repeal)
Rule Title: Permits

Rule No.: 335-3-8-.08 (Repeal)
Rule Title: Compliance Certification

Rule No.: 335-3-8-.09 (Repeal)
Rule Title: NOx Allowance Allocations

Rule No.: 335-3-8-.10 (Repeal)
Rule Title: NOx Allowance Tracking System

Rule No.: 335-3-8-.11 (Repeal)
Rule Title: NOx Allowance Transfers

Rule No.: 335-3-8-.12 (Repeal)
Rule Title: Monitoring and Reporting

Rule No.: 335-3-8-.13 (Repeal)
Rule Title: Individual Unit Opt Ins

Rule No.: 335-3-8-.14 (Repeal)
Rule Title: New Combustion Sources

Rule No.: 335-3-8-.15 (Repeal)
Rule Title: Standards for New Combined Cycle Electric Generating Units

Rule No.: 335-3-8-.16 (Repeal)
Rule Title: CAIR NOx Annual Budget Trading Program

Rule No.: 335-3-8-.17 (Repeal)
Rule Title: CAIR Designated Representative for CAIR NOx Sources

Rule No.: 335-3-8-.18 (Repeal)
Rule Title: CAIR Permits

Rule No.: 335-3-8-.20 (Repeal)
Rule Title: CAIR NOx Allowance Allocations

Rule No.: 335-3-8-.21 (Repeal)
Rule Title: CAIR NOx Allowance Tracking System

Rule No.: 335-3-8-.22 (Repeal)
Rule Title: CAIR NOx Allowance Transfers

Rule No.: 335-3-8-.23 (Repeal)
Rule Title: CAIR Monitoring and Reporting

Rule No.: 335-3-8-.24 (Repeal)
Rule Title: CAIR NOx Opt-in Units

Rule No.: 335-3-8-.25 (Repeal)
Rule Title: CAIR NOx Ozone Season Trading Program

Rule No.: 335-3-8-.26 (Repeal)
Rule Title: CAIR Designated Representative for CAIR NOx Ozone Season Sources

Rule No.: 335-3-8-.27 (Repeal)
Rule Title: CAIR NOx Ozone Season Permits

Rule No.: 335-3-8-.29 (Repeal)
Rule Title: CAIR NOx Ozone Season Allowance Allocations

Rule No.: 335-3-8-.30 (Repeal)
Rule Title: CAIR NOx Ozone Season Allowance Tracking System

Rule No.: 335-3-8-.31 (Repeal)
Rule Title: CAIR NOx Ozone Season Allowance Transfers

Rule No.: 335-3-8-.32 (Repeal)
Rule Title: CAIR NOx Ozone Season Monitoring and Reporting

Rule No.: 335-3-8-.33 (Repeal)
Rule Title: CAIR NOx Ozone Season Opt-in Units

ACTION TAKEN: State whether the rule was adopted with or without changes from the proposed due to written or oral comments:

The attached copies of ADEM Admin. Code div. 335-3, Air Division – Air Pollution Control Program Regulations are correct copies as promulgated and adopted by the Environmental Management Commission on the 9th day of December 2011, without changes from the proposed rules.

NOTICE OF INTENDED ACTION PUBLISHED IN VOLUME: XXIX,
ISSUE NO. 12, AAM, DATED September 30, 2011.

Statutory Rulemaking Authority: Ala. Code §§ 22-22A-5, 22-22A-6, 22-22A-8, 22-28-14, as amended and Ala. Code §§ 41-22-4 and 41-22-5 (as amended).

(Date Filed)
(For LRS Use Only)

Thomas L. Johnston
General Counsel and
Agency Secretary

(Note: In accordance with Ala. Code § 41-22-6(b) (as amended), a proposed rule is required to be certified within 90 days after completion of the notice.)

Part D –

Summary of Reasons Supporting the Revision of the ADEM Administrative Code for Division 3 (Air Division)

Summary of Reasons Supporting the Adoption of the Proposed Amendments to the Alabama Department of Environmental Management's Administrative Code for Division 3 (Air Division)

Revisions to the Division 3 Code are being proposed to delete rules related to the Federal Clean Air Interstate Rule (CAIR) and NOx Budget Trading program.

On May 12, 2005, EPA promulgated the Clean Air Interstate Rule (CAIR). CAIR required 29 states to adopt and submit revisions to their State Implementation Plans (SIPs) to eliminate SO2 and NOx emissions that contribute significantly to downwind nonattainment of the fine particle (PM2.5) and ozone National Ambient Air Quality Standards (NAAQS) promulgated in July 1997. In July 2008, CAIR was remanded by the U.S. Court of Appeals for the District of Columbia Circuit Court. The decision allowed CAIR to remain effective until EPA replaced CAIR with another rule. EPA has since promulgated a replacement Rule that is effective January 1, 2012. Therefore, ADEM is deleting the state CAIR rules to be consistent with the federal rules.

ADEM is also deleting regulations pertaining to the NOx budget trading program, which are no longer applicable.

A detailed index of changes is attached with this summary.

Revisions to Chapter 335-3-1

Revisions to Chapter 335-3-1 are being proposed for revision to delete rules pertaining to NOx and SO2 emissions reporting in relation to the NOx SIP Call and CAIR. Rules 335-3-1-.14 and 335-3-1-.16 are being deleted.

Revisions to Chapter 335-3-5

Revisions to Chapter 335-3-5 are being proposed for revision to delete incorporated CAIR rules in relation to SO2 emissions.

Revisions to Chapter 335-3-8

Revisions to Chapter 335-3-8 are being proposed for revision to delete CAIR and NOx Budget Trading rules with respect to NOx emissions.

No revisions are being made to 335-3-8-.01 (Standards for Portland Cement Kilns) and 335-3-8-.04 (Standards for Stationary Reciprocating Internal Combustion Engines).

ADEM - AIR DIVISION
INDEX OF PROPOSED CHANGES TO DIVISION 3 REGULATIONS

Chapter 335-3-1

Page	Rule	Proposed Changes
1-19	335-3-1-.14	Deleted Rule and Reserved.
1-22	335-3-1-.16	Deleted Rule and Reserved.

Chapter 335-3-5

Page	Rule	Proposed Changes
5-11	335-3-5-.06	Delete the Clean Air Interstate Rules (CAIR) in relation to SO2 emissions. All Reserved.
5-11	335-3-5-.07	
5-11	335-3-5-.08	
5-12	335-3-5-.11	
5-12	335-3-5-.12	
5-13	335-3-5-.13	
5-13	335-3-5-.14	

Chapter 335-3-8

Page	Rule	Proposed Changes
8-14	335-3-8-.05	Deleted "NOx Budget Trading Program" rule. Added Relocated Rule 335-3-8-.14 for "New Combustion Sources"
8-30	335-3-8-.06	Deleted "Authorized Account Representative for NOx Budget Sources" rule. Added Relocated Rule 335-3-8-.15 for "Standards for New Combined-Cycle Electric Generating Units"
8-36	335-3-8-.07	Delete the "NOx Budget Trading Program" in relation to NOx emissions. All Reserved.
8-39	335-3-8-.08	
8-41	335-3-8-.09	

Page	Rule	Proposed Changes
8-48	335-3-8-.10	
8-61	335-3-8-.11	
8-62	335-3-8-.12	
8-75	335-3-8-.13	
8-82	335-3-8-.14	Rule Relocated to 335-3-8-.05. Reserved.
8-82	335-3-8-.15	Rule Relocated to 335-3-8-.06. Reserved.
8-84	335-3-8-.16	
8-104	335-3-8-.17	
8-110	335-3-8-.18	
8-112	335-3-8-.20	Delete the Clean Air Interstate Rules (CAIR) in relation to NOx emissions. All Reserved.
8-123	335-3-8-.21	
8-131	335-3-8-.22	
8-132	335-3-8-.23	
8-142	335-3-8-.24	
8-152	335-3-8-.25	
8-175	335-3-8-.26	
8-180	335-3-8-.27	
8-182	335-3-8-.29	
8-194	335-3-8-.30	
8-202	335-3-8-.31	
8-204	335-3-8-.32	
8-215	335-3-8-.33	

Part E –

Proposed Revisions to Chapter 335-3-1
(General Provisions)

335-3-1-.14 Emissions Reporting Requirements Relating to Budgets for NO_X Emissions.Reserved.

(1) General. The requirements of this rule serve to establish ozone season NO_X emissions reporting requirements from NO_X point sources in order to meet the statewide NO_X transport budget reporting requirements under 40 CFR, §51.122. This rule will not apply to any ozone season after the 2008 ozone season.

(2) Definitions. For the purpose of this rule, the following definitions apply:

(a) "NO_X Point Source" means:

1. A plant or facility which has one or more non-mobile or stationary NO_X sources; and,

2. Has the potential to emit a total of 100 tons of NO_X or more per year.

(b) "Ozone Season" means the period May 1 through September 30 of a year.

(c) "Potential to Emit" shall have the same meaning ascribed in chapters 335-3-1-.1 and 335-3-16 of this division.

(3) Applicability. This rule applies to all owners or operators of NO_X point sources in the State that have NO_X emission sources that are not subject to rules 335-3-8-.01, 335-3-8-.04, or rules 335-3-8-.05 through 335-3-8-.13.

(4) Reporting requirements.

(a) The owner or operator of a point source shall submit NO_X ozone season emissions data as follows:

1. Annual reporting. For each owner or operator, beginning with emission year 2004 and every year thereafter, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR, §§ 51.122(c)(1) and (2) must be submitted to the Department.

2. Triennial reporting. For each owner or operator, beginning with emission year 2005 and every third year thereafter, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR, §51.122(c)(3) must be submitted to the Department.

3. Year 2003 reporting. For each owner or operator, by March 31, 2004, the data specified in 40 CFR, § 51.122(c)(3) must be submitted to the Department.

4. Year 2007 reporting. For each owner or operator, by March 31, 2008, the data specified in 40 CFR, § 51.122(c)(3) must be submitted to the Department.

(b) The data required under subparagraph (a) of this paragraph shall be submitted electronically to the Department in a format prescribed and provided by the Department.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-14, 22-28-18, 22-28-20, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended: April 3, 2007.

335-3-1-.16 ~~Emissions Reporting Requirements Relating to Budgets for SO_2 and NO_x Emissions.~~Reserved.

~~(1) General. The requirements of this rule serve to establish SO_2 and NO_x emissions reporting requirements from point sources in order to meet the statewide transport budget requirements for SO_2 and NO_x under 40 CFR § 51.125.~~

~~(2) Definitions. For the purpose of this rule, the following definitions apply:~~

~~(a) "Point Source" means:~~

~~1. A plant or facility which has one or more non mobile or stationary SO_2 or NO_x sources; and,~~

~~2. Has the potential to emit a total of 100 tons of NO_x or more per year; or~~

~~3. Has the potential to emit a total of 100 tons of SO_2 or more per year.~~

~~(b) "Ozone Season" means the five-month period from May 1 to September 30 of a calendar year.~~

~~(c) "Potential to Emit" shall have the same meaning ascribed in chapters 335-3-14 and 335-3-16 of this division.~~

~~(3) Applicability. This rule applies to all owners or operators of SO_2 or NO_x point sources in the State that have SO_2 or NO_x emission sources that are not subject to rules 335-3-8-.01, 335-3-8-.04, or rules 335-3-8-.16 through 335-3-8-.33.~~

~~(4) Reporting Requirements.~~

~~(a) The owner or operator of a point source shall submit to the Department SO_2 and NO_x annual emissions and NO_x ozone season and ozone daily emissions data, beginning with emission year 2008 and every third year thereafter, by June 30th of the calendar year following the emission year being reported.~~

~~(b) The data required under subparagraph (a) of this paragraph shall be submitted electronically to the Department in a format prescribed by the Department.~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-14, 22-28-18, 22-28-20, 22-22A-5, 22-22A-6, and 22-22A-8.~~
~~**History:** Effective Date: April 3, 2007.~~
~~**Amended:**~~

Part F –

Proposed Revisions to Chapter 335-3-5
(Control of Sulfur Compound Emissions)

335-3-5-.06 ~~State Clean Air Interstate Rule (CAIR) SO_2 Trading Program General Provisions.~~ Reserved.

~~(1) General. The Environmental Protection Agency Regulations, and the Appendices applicable thereto, governing the State Clean Air Interstate Rule (CAIR) SO_2 Trading Program, under § 110 of the Clean Air Act and 40 CFR § 51.124, are incorporated by reference as they exist in 40 CFR 96, Subpart AAA.~~

~~(a) The materials incorporated by reference are available for purchase at a cost of $6.00 and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110. The materials are also available on the web at http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=92a9bc8685fa295df08f42c103b6a1fc&tpl=/ecfrbrowse/Title40/40cfr96_main_02.tpl.~~

~~(2) In the event of any conflict between the regulations contained in rule 335-3-5.06 through 335-3-5-.14 and regulations contained in other chapters of this Administrative Code, the more stringent regulations will take precedence.~~

~~(3) Definitions. For the purpose of rules 335-3-5-06 through 335-3-5-.14, the definitions listed in 40 CFR § 96.202, Subpart AAA, will apply.~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007; March 31, 2009.~~

335-3-5-.07 ~~CAIR Designated Representative for CAIR SO_2 Sources.~~ Reserved.

~~(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR Designated Representative for CAIR SO_2 Sources, are incorporated by reference as they exist in 40 CFR 96 Subpart BBB. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007; March 31, 2009.~~

335-3-5-.08 ~~Permits.~~ Reserved.

~~(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR SO_2 Trading Program Permit Regulations, are incorporated by reference as they exist in 40 CFR 96 Subpart CCC. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-16, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007.~~

335-3-5-.11 ~~CAIR SO_2 Allowance Tracking System.~~ Reserved.

~~(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR SO_2 Allowance Tracking System, are incorporated by reference as they exist in 40 CFR 96 Subpart FFF. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007; March 31, 2009.~~

335-3-5-.12 ~~CAIR SO_2 Allowance Transfers~~. Reserved.

~~(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR SO_2 Allowance Transfers, are incorporated by reference as they exist in 40 CFR 96 Subpart GGG. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007.~~

335-3-5-.13 Monitoring and Reporting. Reserved.

(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR SO_2 Monitoring and Reporting, are incorporated by reference as they exist in 40 CFR 96 Subpart HHH. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-28-14, 22-28-19, 22-28-20 and 41-22-9.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-5-.14 ~~CAIR SO_2 Opt-in Units.~~ Reserved.

~~(1) General. The Environmental Protection Agency Regulations and the Appendices applicable thereto, governing CAIR SO_2 Opt-in Units, are incorporated by reference as they exist in 40 CFR 96 Subpart III. (The materials incorporated by reference are available for purchase and inspection at the Department's offices.)~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, 22-22A-8, and 41-22-9.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007: March 31, 2009.~~

Part G –

Proposed Revisions to Chapter 335-3-8
(Control of Nitrogen Oxide Emissions)

335-3-8-.05 REPEAL ~~NO_x Budget Trading Program~~.

~~(1) Purpose. Rules 335-3-8-.05 through 335-3-8-.13 establish general provisions and the applicability, permitting, allowance, excess emissions, monitoring, and opt-in provisions for the NO_x Budget Trading Program for Alabama's State Implementation Plan as a means of mitigating the interstate transport of ozone and nitrogen oxides pursuant to 40 CFR, § 51.121 and 51.122. The State authorizes the Administrator to assist the State in implementing the NO_x Budget Trading Program by carrying out the functions set forth for the Administrator in such requirements.~~

~~(a) The provisions of rules 335-3-8-.05 through 335-3-8-.13 shall not apply to the control period beginning in 2009 and any control period thereafter.~~

~~(2) Definitions. For the purpose of rules 335-3-8-.05 through 335-3-8-.13, the following definitions apply:~~

~~(a) "Account Certificate of Representation" means the completed and signed submission required by rule 335-3-8-.06 for certifying the designation of a NO_x authorized account representative for a NO_x Budget source or a group of identified NO_x Budget sources who is authorized to represent the owners and operators of such source or sources and of the NO_x Budget units at such source or sources with regard to matters under the NO_x Budget Trading Program.~~

~~(b) "Account Number" means the identification number given by the Administrator to each NO_x Allowance Tracking System account.~~

~~(c) "Acid Rain Emissions Limitation" means, as defined in 40 CFR, § 72.2 and incorporated by reference in ADEM Admin. Code r. 335-3-8-.01, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under Title IV of the CAA.~~

~~(d) "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.~~

~~(e) "Allocate or Allocation" means the determination by the Department or the Administrator of the number of NO_x allowances to be initially credited to a NO_x Budget unit.~~

~~(f) "Automated Data Acquisition and Handling System or DAHS" means that component of the CEMS, or other emissions monitoring system approved for use under rule 335-3-8-.12, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by rule 335-3-8-.12.~~

(g) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(h) "CAA" means the CAA, 42 U.S.C. 7401, et seq., as amended by Pub. L. No. 101-549 (November 15, 1990).

(i) "Cogeneration Combined Cycle System" means a combined cycle system that has equipment used to produce electricity and forms the useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes through the sequential use of energy.

(j) "Combined Cycle System" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(k) "Combustion Turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

(l) "Commence Commercial Operation" means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. Except as provided in paragraph (5) of this rule, for a unit that is a NO_x Budget unit under paragraph (4) of this rule on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or re-powered. Except as provided in paragraph (5) of this rule or rule 335-3-8-.13, for a unit that is not a NO_x Budget unit under paragraph (4) of this rule on the date the unit commences commercial operation, the date the unit becomes a NO_x Budget unit under paragraph (4) of this rule shall be the unit's date of commencement of commercial operation.

(m) "Commence Operation" means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber. Except as provided in paragraph (5) of this rule, for a unit that is a NO_x Budget unit under paragraph (4) of this rule on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. Except as provided in paragraph (5) of this rule or rule 335-3-8-.13, for a unit that is not a NO_x Budget unit under paragraph (4) of this rule on the date of commencement of operation, the date the unit becomes a NO_x Budget unit under paragraph (4) of this rule shall be the unit's date of commencement of operation.

(n) "Common Stack" means a single flue through which emissions from two or more units are exhausted.

(o) "Compliance Account" means a NO_x Allowance Tracking System account, established by the Administrator for a NO_x Budget unit under rule 335-3-8-.10, in which the NO_x allowance allocations for the unit are initially recorded and in which are held NO_x allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_x Budget emissions limitation.

(p) "Compliance Certification" means a submission to the Department or the Administrator, as appropriate, that is required under rule 335-3-8-.08 to report a NO_x Budget source's or a NO_x Budget unit's compliance or noncompliance with this rule and that is signed by the NO_x authorized account representative in accordance with rule 335-3-8-.06.

(q) "Continuous Emission Monitoring System or CEMS" means the equipment required under rule 335-3-8-.12 to sample, analyze, measure, and provide, by readings taken at least once every 15 minutes of the measured parameters, a permanent record of nitrogen oxides emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included, consistent with 40 CFR 75, in a continuous emission monitoring system:

1. Flow monitor;

2. Nitrogen oxides pollutant concentration monitors;

3. Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required by rule 335-3-8-.12;

4. A continuous moisture monitor when such monitoring is required by rule 335-3-8-.12; and

5. An automated data acquisition and handling system.

(r) "Control Period" means the period beginning May 1 of a year and ending on September 30 of the same year, inclusive.

(s) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Department and the Administrator by the NO_x authorized account representative and as determined by the Administrator in accordance with rule 335-3-8-.12.

(t) "Energy Information Administration" means the Energy Information Administration of the United States Department of Energy.

(u) "Excess Emissions" means any tonnage of nitrogen oxides emitted by a NO_x Budget unit during a control period that exceeds the NO_x Budget emissions limitation for the unit.

(v) "Fossil Fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material. Fossil fuel fired means, with regard to a unit:

1. The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than 50 percent of the annual heat input on a Btu basis during any year starting in 1995 or, if a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or

2. The combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year; provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the unit begins combusting fossil fuel.

(w) "General Account" means a NO_x Allowance Tracking System account, established under rule 335-3-8-.10, that is not a compliance account or an overdraft account.

(x) "Generator" means a device that produces electricity.

(y) "Heat Input" means the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the Administrator by the NO_x authorized account representative and as determined by the Department and the Administrator in accordance with rule 335-3-8-.12, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(z) "Life-of-the-Unit, Firm Power Contractual Arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

1. For the life of the unit;

2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

3. For a period equal to or greater than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(aa) "Maximum Design Heat Input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

(bb) "Maximum Potential Hourly Heat Input" means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR 75 to report heat input, this value should be calculated, in accordance with 40 CFR 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit

intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR 75, using the maximum potential flowrate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

(cc) "Maximum Potential NO_X Emission Rate" means the emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with paragraph 3 of Appendix F of 40 CFR 75, using the maximum potential nitrogen oxides concentration as defined in paragraph 2 of Appendix A of 40 CFR 75, and either the maximum oxygen concentration (in percent O_2) or the minimum carbon dioxide concentration (in percent CO_2), under all operating conditions of the unit except for unit start up, shutdown, and upsets.

(dd) "Maximum Rated Hourly Heat Input" means a unit specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

(ee) "Monitoring System" means any monitoring system that meets the requirements of rule 335-3-8-.12, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

(ff) "Most Stringent State or Federal NO_X Emissions Limitation" means, with regard to a NO_X Budget opt-in source, the lowest NO_X emissions limitation (in terms of lb/mmBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

(gg) "Nameplate Capacity" means the maximum electrical generating output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

(hh) "Non-title V Permit" shall have the same meaning as either an "Air Permit" issued pursuant to the rules in chapter 335-3-14 or "Synthetic Minor Operating Permit" defined in chapter 335-3-15.

(ii) "NO_X Allowance" means an authorization by the Department or the Administrator under a NO_X Budget Trading Program established, and approved by the Administrator pursuant to 40 CFR, § 51.121 or § 52.34 to emit up to one ton of nitrogen oxides during the control period of the specified year or of any year thereafter, except as provided under rule 335-3-8-.10(6)(b).

(jj) "NO_X Allowance Deduction or Deduct NO_X Allowances" means the permanent withdrawal of NO_X allowances by the Administrator from a NO_X Allowance Tracking System compliance account or overdraft account to account for the number of tons of NO_X emissions from a NO_X Budget unit for a control period, determined in accordance with rule 335-3-8-.12, or for any other allowance surrender obligation under rules 335-3-8-.05 through 335-3-8-.13.

(kk) "NO_x Allowances Held or Hold NO_x Allowances" means the NO_x allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with rules 335-3-8-.10 and 335-3-8-.11, in a NO_x Allowance Tracking System account.

(ll) "NO_x Allowance Tracking System" means the system by which the Administrator records allocations, deductions, and transfers of NO_x allowances under the NO_x Budget Trading Program.

(mm) "NO_x Allowance Tracking System Account" means an account in the NO_x Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of NO_x allowances.

(nn) "NO_x Allowance Transfer Deadline" means midnight of November 30 or, if November 30 is not a business day, midnight of the first business day thereafter and is the deadline by which NO_x allowances may be submitted for recordation in a NO_x Budget unit's compliance account, or the overdraft account of the source where the unit is located, in order to meet the unit's NO_x Budget emissions limitation for the control period immediately preceding such deadline.

(oo) "NO_x Authorized Account Representative" means, for a NO_x Budget source or NO_x Budget unit at the source, the natural person who is authorized by the owners and operators of the source and all NO_x Budget units at the source, in accordance with rule 335-3-8-.06, to represent and legally bind each owner and operator in matters pertaining to the NO_x Budget Trading Program or, for a general account, the natural person who is authorized, in accordance with rule 335-3-8-.10, to transfer or otherwise dispose of NO_x allowances held in the general account.

(pp) "NO_x Budget Emissions Limitation" means, for a NO_x Budget unit, the tonnage equivalent of the NO_x allowances available for compliance deduction for the unit under rule 335-3-8-.10(5)(a), (b), (e), and (f) in a control period adjusted by deductions of such NO_x allowances to account for excess emissions for a prior control period under rule 335-3-8-.10(5)(d) or, for a NO_x Budget opt-in source, to account for withdrawal from the NO_x Budget Program under rule 335-3-8-.13(7), or for a change in regulatory status for a NO_x Budget opt-in source under rule 335-3-8-.13(8).

(qq) "NO_x Budget Opt-in Permit" means a NO_x Budget permit covering a NO_x Budget opt-in source.

(rr) "NO_x Budget Opt-in Source" means a unit that elects to become a NO_x Budget unit under the NO_x Budget Trading Program and whose NO_x Budget opt-in permit has been issued and is in effect under rule 335-3-8-.13.

(ss) "NO_x Budget Permit" means the legally binding and enforceable written document, or portion of such document, issued by the Department under rules 335-3-8-.05 through 335-3-8-.13, including any permit revisions,

~~specifying the NO_x Budget Trading Program requirements applicable to a NO_x Budget source, to each NO_x Budget unit at the NO_x Budget source, and to the owners and operators and the NO_x authorized account representative of the NO_x Budget source and each NO_x Budget unit.~~

~~(tt) "NO_x Budget Source" means a source that includes one or more NO_x Budget units.~~

~~(uu) "NO_x Budget Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program established pursuant to 40 CFR § 51.121, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.~~

~~(vv) "NO_x Budget Unit" means a unit that is subject to the NO_x Budget Trading Program emissions limitation under paragraph (4) of this rule or rule 335-3-8-.13.~~

~~(ww) "Operating" means, with regard to a unit under rules 335-3-8-.07(3)(d)2. and 335-3-8-.13(1), having documented heat input for more than 876 hours in the 6 months immediately preceding the submission of an application for an initial NO_x Budget permit under rule 335-3-8-.13(4)(a).~~

~~(xx) "Operator" means any person who operates, controls, or supervises a NO_x Budget unit, a NO_x Budget source, or unit for which an application for a NO_x Budget opt-in permit under rule 335-3-8-.13(4) is submitted and not denied or withdrawn and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.~~

~~(yy) "Opt-in" means to elect to become a NO_x Budget unit under the NO_x Budget Trading Program through a final, effective NO_x Budget opt-in permit under rule 335-3-8-.13.~~

~~(zz) "Overdraft Account" means the NO_x Allowance Tracking System account, established by the Administrator under rule 335-3-8-.10, for each NO_x Budget source where there are two or more NO_x Budget units.~~

~~(aaa) "Owner" means any of the following persons:~~

~~1. Any holder of any portion of the legal or equitable title in a NO_x Budget unit or in a unit for which an application for a NO_x Budget opt-in permit under rule 335-3-8-.13(4) is submitted and not denied or withdrawn; or~~

~~2. Any holder of a leasehold interest in a NO_x Budget unit or in a unit for which an application for a NO_x Budget opt-in permit under rule 335-3-8-.13(4) is submitted and not denied or withdrawn; or~~

~~3. Any purchaser of power from a NO_x Budget unit or from a unit for which an application for a NO_x Budget opt-in permit under rule 335-3-8-.13(4) is submitted and not denied or withdrawn under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who~~

has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NO_X Budget unit or the unit for which an application for a NO_X Budget opt-in permit under rule 335-3-8-.13(4) is submitted and not denied or withdrawn; or

4. With respect to any general account, any person who has an ownership interest with respect to NO_X allowances held in the general account and who is subject to the binding agreement for the NO_X authorized account representative to represent that person's ownership interest with respect to NO_X allowances.

(bbb) "Department" means the Alabama Department of Environmental Management authorized by the Administrator to issue or revise permits to meet the requirements of the NO_X Budget Trading Program in accordance with rule 335-3-8-.07.

(ccc) "Receive or Receipt of" means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.

(ddd) "Recordation, Record, or Recorded" means, with regard to NO_X allowances, the movement of NO_X allowances by the Administrator from one NO_X Allowance Tracking System account to another, for purposes of allocation, transfer, or deduction.

(eee) "Reference Method" means any direct test method of sampling and analyzing for an air pollutant or diluent as specified in 40 CFR 60, Appendix A [incorporated by reference in ADEM Admin. Code r. 335-3-10-.03(1)].

(fff) "Serial Number" means, when referring to NO_X allowances, the unique identification number assigned to each NO_X allowance by the Administrator, under rule 335-3-8-.10(4)(c).

(ggg) "Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the CAA. For purposes of paragraph 502(c) of the CAA, a "source", including a "source" with multiple units, shall be considered a single "facility".

(hhh) "State" means the State of Alabama, the Environmental Management Commission, and the Commission's representatives.

(iii) "State Trading Program Budget" means the total number of NO_X tons apportioned to all NO_X Budget units in the State, in accordance with the NO_X Budget Trading Program, for use in a given control period.

(jjj) "Submit or Serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

1. In person;

2. By United States Postal Service; or

3. By other means of dispatch or transmission and delivery.

(i) Compliance with any "submission", "service", or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(kkk) "Title V Operating Permit" means a "Major Source Operating Permit" as defined and issued under chapter 335-3-16. Title V operating permit regulations means the Major Source Operating Permits regulations in chapter 335-3-16 that the Administrator has approved or issued as meeting the requirements of Title V of the CAA and 40 CFR 70 or 71.

(lll) "Ton or Tonnage" means any "short ton" (i.e., 2,000 pounds). For the purpose of determining compliance with the NO_x Budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with rule 335-3-8-.12, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.

(mmm) "Unit" means a fossil-fuel-fired stationary boiler, combustion turbine, combined cycle system, or cogeneration combined cycle system.

(nnn) "Unit Load" means the total (i.e., gross) output of a unit in any control period (or other specified time period) produced by combusting a given heat input of fuel, expressed in terms of:

1. The total electrical generation (MWe) produced by the unit, including generation for use within the plant; or

2. In the case of a unit that uses heat input for purposes other than electrical generation, the total steam produced by the unit, including steam for use by the unit.

(ooo) "Unit Operating Day" means a calendar day in which a unit combusts any fuel.

(ppp) "Unit Operating Hour or Hour of Unit Operation" means any hour (or fraction of an hour) during which a unit combusts any fuel.

(qqq) "Utilization" means the heat input (expressed in mmBtu/time) for a unit. The unit's total heat input for the control period in each year will be determined in accordance with 40 CFR 75 if the NO_x Budget unit was

otherwise subject to the requirements of 40 CFR 75 for the year, or will be based on the best available data reported to the Administrator and the Department for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

(3) Measurements, Abbreviations, and Acronyms. Measurements, abbreviations, and acronyms used in this rule are defined as follows:

(a) Btu--British thermal unit.

(b) hr--hour.

(c) Kwh--kilowatt hour.

(d) lb--pounds.

(e) mmBtu--million Btu.

(f) MWe--megawatt electrical.

(g) ton--2000 pounds.

(h) CO_2--carbon dioxide.

(i) NO_X--nitrogen oxides.

(j) O_2--oxygen.

(4) Applicability.

(a) The following units in the Counties of Autauga, Bibb, Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, Dallas, Dekalb, Elmore, Etowah, Fayette, Franklin, Greene, Hale, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Lee, Limestone, Macon, Madison, Marion, Marshall, Morgan, Perry, Pickens, Randolph, Russell, Shelby, St. Clair, Sumter, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston shall be NO_X Budget units, and any source that includes one or more such units shall be a NO_X Budget source, subject to the requirements of this rule:

1. Any unit that any time on or after January 1, 1995, serves a generator with a nameplate capacity greater than 25 MWe and sells any amount of electricity; or,

2. Any unit that is not a unit under subparagraph (a)1. of this paragraph and that has a maximum design heat input greater than 250 mmBtu/hr.

(5) Retired Unit Exemption.

(a) This paragraph applies to any NO_X Budget unit, other than a NO_X Budget opt-in source, that is permanently retired.

(b) Any NO_x Budget unit, other than a NO_x Budget opt-in source, that is permanently retired shall be exempt from the NO_x Budget Trading Program, except for the provisions of this paragraph, paragraphs (2), (3), (4), and (7) of this rule and rules 335-3-8-.09, 335-3-8-.10, and 335-3-8-.11 of this Division.

1. The exemption under subparagraph (b) of this paragraph shall become effective the day on which the unit is permanently retired. Within 30 days of permanent retirement, the NO_x authorized account representative (authorized in accordance with rule 335-3-8-.06) shall submit a statement to the Department. A copy of the statement shall be submitted to the Administrator. The statement shall state (in a format prescribed by the Department) that the unit is permanently retired and will comply with the requirements of subparagraph (c) of this paragraph. After receipt of the notice under this subparagraph, the Department will amend any permit covering the source at which the unit is located to add the provisions and requirements of the exemption under subparagraphs (b) and (c) of this paragraph.

(c) Special provisions.

1. A unit exempt under this paragraph shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.

2. The owners and operators of the unit will be allocated allowances in accordance with rule 335-3-8-.09(m). For each control period for which the retired unit has remaining, one or more NO_x allowances, the owners and operators of the unit shall specify a general account, in which the Administrator will record such NO_x allowances.

3. A unit exempt under this paragraph and located at a source that is required, or but for this exemption would be required, to have a major source (Title V) operating permit shall not resume operation unless the NO_x authorized account representative of the source submits a complete NO_x Budget permit application under rule 335-3-8-.07(3) for the unit not less than 18 months (or such lesser time provided under the Department's major source operating permits regulations for final action on a permit application) prior to the later of May 31, 2004 or the date on which the unit is to first resume operation.

4. A unit exempt under this paragraph and located at a source that is required, or but for this exemption would be required, to have a synthetic minor operating permit shall not resume operation unless the NO_x authorized account representative of the source submits a complete NO_x Budget permit application under rule 335-3-8-.07(3) for the unit not less than 18 months (or such lesser time provided under the Department's synthetic minor operating permits regulations for final action on a permit application) prior to the later of May 31, 2004 or the date on which the unit is to first resume operation.

5. The owners and operators and, to the extent applicable, the NO_x authorized account representative of a unit exempt under this paragraph shall comply with the requirements of the NO_x Budget Trading Program concerning

all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

6. A unit that is exempt under this paragraph is not eligible to be a NO_x Budget opt-in source under rule 335-3-8-.13.

7. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this paragraph shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Department or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

8. Loss of exemption.

(i) On the earlier of the following dates, a unit exempt under subparagraph (b) of this paragraph shall lose its exemption:

(I) The date on which the NO_x authorized account representative submits a NO_x Budget permit application under subparagraph (c)2. of this paragraph; or

(II) The date on which the NO_x authorized account representative is required under subparagraphs (c)3. and (c)4. of this paragraph to submit a NO_x Budget permit application.

(ii) For the purpose of applying monitoring requirements under rule 335-3-8-.12, a unit that loses its exemption under this paragraph shall be treated as a unit that commences operation or commercial operation on the first date on which the unit resumes operation.

(6) Standard Requirements.

(a) Permit Requirements.

1. The NO_x authorized account representative of each NO_x Budget source required to have an enforceable permit and each NO_x Budget unit required to have an enforceable permit at the source shall:

(i) Submit to the Department a complete NO_x Budget permit application under rule 335-3-8-.07(3) in accordance with the deadlines specified in rules 335-3-8-.07(2)(b), (c) and (d);

(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a NO_x Budget permit application and issue or deny a NO_x Budget permit.

2. The owners and operators of each NO_x Budget source required to have an enforceable permit and each NO_x Budget unit required to have an

enforceable permit at the source shall have a NO_X Budget permit issued by the Department and operate the unit in compliance with such NO_X Budget permit.

3. The owners and operators of a NO_X Budget source that are not otherwise required to have an enforceable permit are not required to submit a NO_X Budget permit application, and to have a NO_X Budget permit, under rule 335-3-8-.07 for such NO_X Budget source.

(b) Monitoring requirements.

1. The owners and operators and, to the extent applicable, the NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall comply with the monitoring requirements of rule 335-3-8-.12.

2. The emissions measurements recorded and reported in accordance with rule 335-3-8-.12 shall be used to determine compliance by the unit with the NO_X emissions limitation under subparagraph (c) below.

(c) Nitrogen Oxides requirements.

1. The owners and operators of each NO_X Budget source and each NO_X Budget unit at the source shall hold NO_X allowances available for compliance deductions under rule 335-3-8-.10(5)(a), (b), (c), or (f), as of the NO_X allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_X emissions for the control period from the unit, as determined in accordance with rule 335-3-8-.12, plus any amount necessary to account for excess emissions for a prior control period under rule 335-3-8-.10(5)(d) or, for a NO_X Budget opt-in source, to account for withdrawal from the NO_X Budget Program under rule 335-3-8-.13(7), or for a change in regulatory status for a NO_X Budget opt-in source under rule 335-3-8-.13(8).

2. Each ton of nitrogen oxides emitted in excess of the NO_X Budget emissions limitation shall constitute a separate violation of this Division, the CAA, and applicable State law.

3. A NO_X Budget unit shall be subject to the requirements under subparagraph (c)1. of this paragraph starting on the later of May 31, 2004 or the date on which the unit commences operation.

4. NO_X allowances shall be held in, deducted from, or transferred among NO_X Allowance Tracking System accounts in accordance with rules 335-3-8-.09, 335-3-8-.10, 335-3-8-.11, and 335-3-8-.13 of this Division.

5. A NO_X allowance shall not be deducted, in order to comply with the requirements under subparagraph (c)1. of this paragraph, for a control period in a year prior to the year for which the NO_X allowance was allocated.

6. A NO_X allowance allocated by the Department or the Administrator under the NO_X Budget Trading Program is a limited authorization to emit one

ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under paragraph (5) of this rule and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.

7. A NO_x allowance allocated by the Department or the Administrator under the NO_x Budget Trading Program does not constitute a property right.

8. Upon recordation by the Administrator under rules 335-3-8-.10, 335-3-8-.11, or 335-3-8-.13, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x budget permit of the NO_x budget unit by operation of law without further review.

(d) Excess emissions requirements.

1. The owners and operators of a NO_x Budget unit that has excess emissions in any control period shall:

(i) Surrender the NO_x allowances required for deduction under rule 335-3-8-.10(5)(d)1.; and

(ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 335-3-8-.10(5)(d)3.

(e) Recordkeeping and Reporting requirements.

1. Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Department or the Administrator.

(i) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with rule 335-3-8-.06(4); provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.

(ii) All emissions monitoring information, in accordance with rule 335-3-8-.12; provided that to the extent that rule 335-3-8-.12 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.

(iv) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.

2. The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under rules 335-3-8-.08, 335-3-8-.12, or 335-3-8-.13.

(f) Liability.

1. Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under paragraph (5) of this rule shall be subject to enforcement pursuant to applicable State or Federal law.

2. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.

3. No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.

4. Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.

5. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source (including a provision applicable to the NO_x authorized account representative of a NO_x Budget source) shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.

6. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit (including a provision applicable to the NO_x authorized account representative of a NO_x budget unit) shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under rule 335-3-8-.12, the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(g) Effect on other authorities. No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under paragraph (5) of this rule shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit

~~from compliance with any other provision of the applicable, approved State Implementation Plan, an enforceable permit, or the CAA.~~

~~(7) Computation of time.~~

~~(a) Unless otherwise stated, any time period scheduled, under the NO_X Budget Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.~~

~~(b) Unless otherwise stated, any time period scheduled, under the NO_X Budget Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.~~

~~(c) Unless otherwise stated, if the final day of any time period, under the NO_X Budget Trading Program, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.~~
~~**History:** Effective Date: April 6, 2001.~~
~~**Amended:** July 11, 2006; April 3, 2007.~~

New Combustion Sources.

(1) No person shall cause or permit emissions of nitrogen oxides from a new gas-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.20 pounds per million BTU of heat input per hour.

(2) No person shall cause or permit emissions of nitrogen oxides from a new oil-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.30 pounds per million BTU of heat input per hour.

(3) No person shall cause or permit emission of nitrogen oxides from a new coal-fired boiler with a capacity of 250 million BTU per hour or more in excess of 0.7 pounds per million BTU of heat input per hour.

(4) For purposes of this rule, the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of nitrogen oxides that passes through a stack or stacks.

Author: James W. Cooper and John E. Daniel.
Statutory Authority: Code of Alabama 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 18, 1972.
Amended: April 6, 2001; XXXXXX.

335-3-8-.06 (REPEAL) ~~Authorized Account Representative for NO_x Budget Sources~~.

~~(1) Authorization and responsibilities of the NO_x authorized account representative.~~

~~(a) Except as provided under paragraph (2) below, each NO_x Budget source, including all NO_x Budget units at the source, shall have one and only one NO_x authorized account representative, with regard to all matters under the NO_x Budget Trading Program concerning the source or any NO_x Budget unit at the source.~~

~~(b) The NO_x authorized account representative of the NO_x Budget source shall be selected by an agreement binding on the owners and operators of the source and all NO_x Budget units at the source.~~

~~(c) Upon receipt by the Administrator of a complete account certificate of representation under paragraph (4) of this rule, the NO_x authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO_x Budget source represented and each NO_x Budget unit at the source in all matters pertaining to the NO_x Budget Trading Program, not withstanding any agreement between the NO_x authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO_x authorized account representative by the Department, the Administrator, or a court regarding the source or unit.~~

~~(d) No NO_x Budget permit shall be issued, and no NO_x Allowance Tracking System account shall be established for a NO_x Budget unit at a source, until the Administrator has received a complete account certificate of representation under paragraph (4) of this rule for a NO_x authorized account representative of the source and the NO_x Budget units at the source.~~

~~(e) Each submission under the NO_x Budget Trading Program shall be submitted, signed, and certified by the NO_x authorized account representative for each NO_x Budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NO_x authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_x Budget sources or NO_x Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

1. The Department and the Administrator will accept or act on a submission made on behalf of owner or operators of a NO_X Budget source or a NO_X Budget unit only if the submission has been made, signed, and certified in accordance with subparagraph (e) of this paragraph.

(2) Alternate NO_X authorized account representative.

(a) An account certificate of representation may designate one and only one alternate NO_X authorized account representative who may act on behalf of the NO_X authorized account representative. The agreement by which the alternate NO_X authorized account representative is selected shall include a procedure for authorizing the alternate NO_X authorized account representative to act in lieu of the NO_X authorized account representative.

(b) Upon receipt by the Administrator of a complete account certificate of representation under paragraph (4) of this rule, any representation, action, inaction, or submission by the alternate NO_X authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_X authorized account representative.

(c) Except in this paragraph and paragraphs (1)(a), (3), and (4) of this rule, and rule 335-3-8-.10(2), whenever the term "NO_X authorized account representative" is used in rules 335-3-8-.05 through 335-3-8-.13, the term shall be construed to include the alternate NO_X authorized account representative.

(3) Changing the NO_X authorized account representative and the alternate NO_X account representative; changes in owners and operators.

(a) Changing the NO_X authorized account representative. The NO_X authorized account representative may be changed at any time upon receipt by the Administrator of a superseding complete account certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_X authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(b) Changing the alternate NO_X authorized account representative. The alternate NO_X authorized account representative may be changed at any time upon receipt by the Administrator of a superseding complete account certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_X authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new alternate NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(c) Changes in the owners and operators.

1. In the event a new owner or operator of a NO_X Budget source or a NO_X Budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NO_X authorized account representative and any alternate NO_X authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Department or the Administrator, as if the new owner or operator were included in such list.

2. Within 30 days following any change in the owners and operators of a NO_X Budget source or a NO_X Budget unit, including the addition of a new owner or operator, the NO_X authorized account representative or alternate NO_X authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

(4) Account certificate of representation.

(a) A complete account certificate of representation for a NO_X authorized account representative or an alternate NO_X authorized account representative shall include the following elements in a format prescribed by the Administrator:

1. Identification of the NO_X Budget source and each NO_X Budget unit at the source for which the account certificate of representation is submitted.

2. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NO_X authorized account representative and any alternate NO_X authorized account representative.

3. A list of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source.

4. The following certification statement by the NO_X authorized account representative and any alternate NO_X authorized account representative: "I certify that I was selected as the NO_X authorized account representative or alternate NO_X authorized account representative, as applicable, by an agreement binding on the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_X Budget Trading Program on behalf of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department, the Administrator, or a court regarding the source or unit."

5. The signature of the NO_X authorized account representative and any alternate NO_X authorized account representative and the dates signed.

~~(b) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.~~

~~(5) Objections concerning the NO_X authorized account representative.~~

~~(a) Once a complete account certificate of representation under paragraph (4) of this rule has been submitted and received, the Department and the Administrator will rely on the account certificate of representation unless and until a superseding complete account certificate of representation under paragraph (4) of this rule is received by the Administrator.~~

~~(b) Except as provided in subparagraph (3)(a) or (b) of this rule, no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO_X authorized account representative shall affect any representation, action, inaction, or submission of the NO_X authorized account representative or the finality of any decision or order by the Department or the Administrator under the NO_X Budget Trading Program.~~

~~(c) Neither the Department nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO_X authorized account representative, including private legal disputes concerning the proceeds of NO_X allowance transfers.~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.~~
~~**History:** Effective Date: April 6, 2001.~~
~~**Amended:**~~
Standards for New Combined-Cycle Electric Generating Units.

(1) Applicability. The requirements of this rule apply to all natural gas-fired and fuel oil-fired combined-cycle electric generating units which commence operation on or after April 1, 2003. The requirements of this rule do not pre-empt the applicability of any other State or Federal regulations.

(2) Definitions. For the purposes of this rule, the following definitions apply:

(a) "Combined-Cycle Electric Generating Unit" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(b) "Commence Operation" means to have begun to produce steam, gas, or other heated medium used to generate electricity for use or sale, including test generation.

(c) "Fuel Oil" means any petroleum-based fuel (including diesel fuel) as defined by the American Society for Testing and Materials in ASTM D396-90a, "Standard Specification for Fuel Oils".

(d) "Natural Gas" means a naturally fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

(3) Emission Limitations.

(a) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by natural gas in excess of 4.0 ppmvd at 15% O_2.

(b) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by fuel oil in excess of 15.0 ppmvd at 15% O_2.

(4) Compliance Method. Compliance with the nitrogen oxides emissions limitations in paragraph (3) of this rule shall be determined by EPA Reference Method 20 as found in 40 CFR 60, Appendix A [and incorporated by reference in rule 335-3-10-.03(1)].

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 23, 2003.
Amended: XXXXXX.

335-3-8-.07 REPEAL ~~Permits.~~ Reserved.

~~(1) General NO_x Budget trading program permit requirements.~~

~~(a) For each NO_x Budget source required to have an enforceable permit, such permit shall include a NO_x Budget permit administered by the Department. Any requirements of the NO_x Budget permit shall be considered federally enforceable.~~

~~1. For NO_x Budget sources required to have a major source operating permit, the NO_x Budget portion of the major source operating permit shall be administered in accordance with the Department's major source operating permits regulations promulgated under chapter 335-3-16, except as provided otherwise by this rule or rule 335-3-8-.13. The applicable provisions of such major source operating permits regulations shall include, but are not limited to, those provisions addressing operating permit applications, operating permit application shield, operating permit duration, operating permit shield, operating permit issuance, operating permit revision and reopening, public participation, State review, and review by the Administrator.~~

~~2. For NO_x Budget sources required to have a non-title V permit, the NO_x Budget portion of the permit shall be administered in accordance with chapter 335-3-14 or 335-3-15, except as provided otherwise by this rule or rule 335-3-8-.13. The applicable provisions of such permit regulations may include, but are not limited to, provisions addressing permit applications, permit issuance, permit revision and reopening, public participation, and review by the Administrator.~~

~~(b) Each NO_x Budget permit (including a draft or proposed NO_x Budget permit, if applicable) shall contain all applicable NO_x Budget Trading Program requirements and shall be a complete and segregable portion of the permit under subparagraph (a) of this paragraph.~~

~~(2) Submission of NO_x Budget permit applications.~~

~~(a) Duty to apply. The NO_x authorized account representative of any NO_x Budget source required to have an enforceable permit shall submit to the Department a complete NO_x Budget permit application under paragraph (3) of this rule by the applicable deadline in subparagraph (b) or (c) below.~~

~~(b) For NO_x Budget sources required to have a major source operating permit:~~

~~1. For any source, with one or more NO_x Budget units under rule 335-3-8-.05(4) that commenced operation before January 1, 2001, the NO_x authorized account representative shall submit a complete NO_x Budget permit application under paragraph (3) of this rule covering such NO_x Budget units to the Department at least 18 months (or such lesser time provided under chapter 335-3-16 for final action on a permit application) before May 31, 2004.~~

2. For any source, with any NO_x Budget unit under rule 335-3-8-.05(4) that commences operation on or after January 1, 2001, the NO_x authorized account representative shall submit a complete NO_x Budget permit application under paragraph (3) of this rule covering such NO_x Budget unit to the Department at least 18 months (or such lesser time provided under chapter 335-3-16 for final action on a permit application) before the later of May 31, 2004 or the date on which the NO_x Budget unit commences operation.

(c) For NO_x Budget sources required to have a non-title V permit:

1. For any source, with one or more NO_x Budget units under rule 335-3-8-.05(4) that commenced operation before January 1, 2001, the NO_x authorized account representative shall submit a complete NO_x Budget permit application under paragraph (3) of this rule covering such NO_x Budget units to the Department at least 18 months (or such lesser time provided under the Department's permit regulations in chapter 335-3-14 or 335-3-15 for final action on a permit application) before May 31, 2004.

2. For any source, with any NO_x Budget unit under rule 335-3-8-.05(4) that commenced operation on or after January 1, 2001, the NO_x authorized account representative shall submit a complete NO_x Budget permit application under paragraph (3) of this rule covering such NO_x Budget unit to the Department at least 18 months (or such lesser time provided under the Department's permit regulations in chapter 335-3-14 or chapter 335-3-15 for final action on a permit application) before the later of May 31, 2004 or the date on which the NO_x Budget unit commences operation.

(d) Duty to reapply. For a NO_x Budget source required to have a major source operating permit, the NO_x authorized account representative shall submit a complete NO_x Budget permit application under paragraph (3) of this rule for the NO_x Budget source covering the NO_x Budget units at the source in accordance with the Department's major source operating permits regulations in chapter 335-3-16 addressing operating permit renewal.

(3) Information requirements for NO_x Budget permit applications. A complete NO_x Budget permit application shall include the following elements concerning the NO_x Budget source for which the application is submitted, in a format prescribed by the Department:

(a) Identification of the NO_x Budget source, including plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration, if applicable;

(b) Identification of each NO_x Budget unit at the NO_x Budget source and whether it is a NO_x budget unit under rules 335-3-8-.05(4) or 335-3-8-.13;

(c) The standard requirements under rule 335-3-8-.05(6); and

(d) For each NO_x Budget opt-in unit at the NO_x Budget source, the following certification statements by the NO_x authorized account representative:

1. "I certify that each unit for which this permit application is submitted under rule 335-3-8-.13 is not a NO_x Budget unit under rule 335-3-8-.05(4) and is not covered by a retired unit exemption under rule 335-3-8-.05(5) that is in effect."

2. If the application is for an initial NO_x Budget opt-in permit, "I certify that each unit for which this permit application is submitted under rule 335-3-8-.13 is currently operating, as that term is defined under rule 335-3-8-.05(2)."

(4) NO_x Budget permit contents.

(a) Each NO_x Budget permit (including any draft or proposed NO_x Budget permit, if applicable) will contain, in a format prescribed by the Department, all elements required for a complete NO_x Budget permit application under paragraph (3) of this rule.

(b) Each NO_x Budget permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.05(2) and, upon recordation by the Administrator under rules 335-3-8-.10, 335-3-8-.11, or 335-3-8-.13 of this Division, every allocation, transfer, or deduction of a NO_x allowance to or from the compliance accounts of the NO_x Budget units covered by the permit or the overdraft account of the NO_x Budget source covered by the permit.

(5) Effective date of initial NO_x Budget permit. The initial NO_x Budget permit covering a NO_x Budget unit for which a complete NO_x Budget permit application is timely submitted under subparagraph (2)(b) or 2(c) of this rule shall become effective by the later of:

(a) May 31, 2004;

(b) May 1 of the year in which the NO_x Budget unit commences operation, if the unit commences operation on or before May 1 of that year;

(c) The date on which the NO_x Budget unit commences operation, if the unit commences operation during a control period; or

(d) May 1 of the year following the year in which the NO_x Budget unit commences operation, if the unit commences operation on or after October 1 of the year.

(6) NO_x Budget permit revisions.

(a) For a NO_x Budget source with a major source operating permit, except as provided in subparagraph (4)(b) of this rule, the Department will revise the NO_x Budget permit, as necessary, in accordance with the Department's major source operating permits regulations in chapter 335-3-16 addressing permit revisions.

(b) For a NO_x Budget source with a non-title V permit, except as provided in subparagraph (4)(b) of this rule, the Department will revise the NO_x

~~Budget permit, as necessary, in accordance with the Department's permit regulations in chapter 335-3-14 or 335-3-15, as applicable.~~

~~Author:~~ ~~Ronald W. Gore.~~
~~Statutory Authority:~~ ~~Code of Alabama~~ ~~1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-16, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.~~
~~History:~~ ~~Effective Date: April 6, 2001.~~
~~Amended:~~

335-3-8-.08 REPEAL ~~Compliance Certification~~ Reserved.

~~(1) Compliance certification report.~~

~~(a) Applicability and deadline. For each control period in which one or more NO_x Budget units at a source are subject to the NO_x Budget emissions limitation, the NO_x authorized account representative of the source shall submit to the Department and the Administrator by November 30 of that year, a compliance certification report for each source covering all such units.~~

~~(b) Contents of report. The NO_x authorized account representative shall include in the compliance certification report under subparagraph (a) of this paragraph the following elements, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NO_x Budget emissions limitation for the control period covered by the report:~~

~~1. Identification of each NO_x Budget unit;~~

~~2. The serial numbers of the NO_x allowances that are to be deducted from each unit's compliance account under rule 335-3-8-.10(5) for the control period;~~

~~3. For units sharing a common stack and having NO_x emissions that are not monitored separately or apportioned in accordance with rule 335-3-8-.12, the percentage of allowances that is to be deducted from each unit's compliance account under rule 335-3-8-.10(5)(e); and~~

~~4. The compliance certification under subparagraph (c) of this paragraph.~~

~~(c) Compliance certification. In the compliance certification report under subparagraph (a) above, the NO_x authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NO_x Budget units at the source in compliance with the NO_x Budget Trading Program, whether each NO_x Budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NO_x Budget Trading Program applicable to the unit, including:~~

~~1. Whether the unit was operated in compliance with the NO_x Budget emissions limitation;~~

~~2. Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NO_x emissions to the unit, in accordance with rule 335-3-8-.12;~~

~~3. Whether all the NO_x emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring~~

reports, including whether conditional data were reported in the quarterly reports in accordance with rule 335-3-8-.12. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report re-submissions has been made;

4. Whether the facts that form the basis for certification under rule 335-3-8-.12 of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under rule 335-3-8-.12, if any, has changed; and

5. If a change is required to be reported under subparagraph (c)4. of this paragraph, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

(2) Department's and Administrator's action on compliance certifications.

(a) The Department or the Administrator may review and conduct independent audits concerning any compliance certification or any other submission under the NO_x Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions.

(b) The Administrator may deduct NO_x allowances from or transfer NO_x allowances to a unit's compliance account or a source's overdraft account based on the information in the compliance certifications or other submissions, as adjusted under subparagraph (a) of this paragraph.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended:

335-3-8-.09 REPEAL ~~NO_x Allowance Allocations.~~ Reserved.

~~(1) State Trading Program Budget. The State trading program budget allocated by the Department under paragraph (3) of this rule for a control period will equal the total number of tons of NO_x emissions apportioned to the NO_x Budget units under rule 335-3-8-.05(4) in the State for the control period, as determined by the applicable, approved State Implementation Plan.~~

~~(2) Timing Requirements for NO_x Allowance Allocations.~~

~~(a) By April 6, 2001, the Department will submit to the Administrator the NO_x allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in 2004, 2005, and 2006.~~

~~(b) By April 1, 2004 and April 1 of every third year thereafter (i.e. 2007, 2010, 2013, etc.), the Department will submit to the Administrator the NO_x allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in the three years that are three, four, and five years, respectively, after the year of the applicable deadline for submission under this subparagraph (b). If the Department fails to submit to the Administrator the NO_x allowance allocations in accordance with this subparagraph (b), the Administrator will allocate, for the applicable control periods, the same number of NO_x allowances as were allocated for the preceding control periods.~~

~~(3) NO_x Allowance Allocations.~~

~~(a) Definitions. For the purpose of this rule, the following definitions apply:~~

~~1. Baseline NO_x Budget Unit. A NO_x Budget unit that either:~~

~~(i) Commenced operation on or before May 1, 1999; or~~

~~(ii) Submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before October 2, 2000.~~

~~2. Replacement NO_x Budget Unit.~~

~~(i) A NO_x Budget unit, which replaces at the same facility, a Baseline NO_x budget unit with the same or less design heat input capacity; or~~

~~(ii) The portion of a NO_x Budget unit, which replaces at the same facility, a Baseline NO_x Budget unit with the same or less design heat input capacity.~~

~~3. New NO_x Budget Unit.~~

~~(i) A NO_x Budget unit that does not meet the definition of either Baseline NO_x Budget Unit or Replacement NO_x Budget Unit as defined in (3)(a)1. and (3)(a)2. of this rule; or~~

(ii) The portion of a NOx Budget unit that does not meet the definition of either Baseline NOx Budget Unit or Replacement NOx Budget Unit as defined in (3)(a)1. and (3)(a)2. of this rule.

(b) Determination of Heat Input.

1. The heat input (in mmBtu) used for calculating NOx allowance allocations under subparagraph (2)(a) of this rule will be:

(i) For a baseline NOx Budget unit that commenced operation on or before May 1, 1999, the average of the two highest amounts of the unit's heat input for the control periods in 1997, 1998, and 1999; or

(ii) For a baseline NOx Budget unit that did not commence operation on or before May 1, 1999 but had submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before October 2, 2000, the expected actual ozone season heat input based on actual utilization data of similar sources.

2. The heat input (in mmBtu) used for calculating NOx allowance allocations under subparagraph (2)(b) of this rule that are to be submitted to the Administrator on April 1, 2004 will be:

(i) For a baseline or replacement NOx Budget unit that commenced operation on or before May 1, 2001, the average of the two highest amounts of the unit's heat input for the control periods in 2001, 2002, and 2003; or

(ii) For a baseline or replacement NOx Budget unit that did not commence operation on or before May 1, 2001 but did commence operation on or before May 1, 2002, the average heat input for the control periods in 2002 and 2003; or

(iii) For a baseline or replacement NOx Budget unit that did not commence operation on or before May 1, 2002 but did commence operation on or before May 1, 2003, the heat input for the control period in 2003; or

(iv) For a replacement NOx Budget unit that did not commence operation on or before May 1, 2003, the average of the two highest amounts of the heat inputs for the control periods in 2001, 2002, and 2003 for the baseline NOx Budget unit that it replaced.

(v) For a new NOx Budget unit that commenced operation on or before May 1, 2003, the average of the two highest amounts of the unit's heat input for the control periods in 2001, 2002, and 2003; or

(vi) For a new NOx Budget unit that did not commence operation on or before May 1, 2003, the expected actual ozone season heat input based on actual utilization data of similar sources.

3. The heat input (in mmBtu) used for calculating NO_x allowance allocations under subparagraph (2)(b) of this rule that are to be submitted to the Administrator on April 1, 2007 and all subsequent years will be:

(i) For a baseline NO_x Budget unit, the average of the two highest amounts of the unit's heat input for the three most recent control periods (e.g. allocations calculated for submission to the Administrator on April 1, 2007 will be based on ozone season heat inputs from 2004, 2005, and 2006); or

(ii) For a replacement NO_x Budget unit, if the average of the two highest amounts of the unit's heat input for the three most recent control periods is less than or equal to the average of the two highest amounts of the ozone season heat inputs of the baseline NO_x Budget unit that it replaced during the last three control periods that it operated, the unit's calculated average ozone season heat input will be used; or

(iii) For a replacement NO_x Budget unit, if the average of the two highest amounts of the unit's heat input for the three most recent control periods is greater than the average of the two highest amounts of the ozone season heat inputs of the baseline NO_x Budget unit that it replaced during the last three control periods that it operated, the average of the two highest amounts of the ozone season heat inputs of the baseline NO_x Budget unit that it replaced during the last three control periods that it operated will be used; or

(iv) For a new NO_x Budget unit that commenced operation prior to or during the most recent control period, the average of the two highest amounts of the unit's heat input for the three most recent control periods; or

(v) For a new NO_x Budget unit that did not commence operation prior to or during the most recent control period, the expected actual ozone season heat input based on actual utilization data of similar sources.

4. The unit's total heat input for the control period in each year specified under subparagraph (a) of this paragraph will be determined in accordance with 40 CFR 75 if the NO_x Budget unit was otherwise subject to the requirements of 40 CFR 75 for the year, or will be based on the best available data reported to the Administrator and the Department for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

(c) Establishment of Baseline and Retired Unit Allowance Pools. At the time NO_x allowances are initially allocated to baseline NO_x Budget units under subparagraph (e)1. of this paragraph, each unit's allocation will be permanently recorded as that unit's "Baseline Allowance". This value will be used to calculate the following:

1. Baseline Allowance Pool. The Baseline Allowance Pool shall be calculated each time NO_x allowances are allocated under subparagraph (2)(b) of this rule and shall equal the sum of the Baseline Allowances for all baseline NO_x Budget units that have not retired in accordance with rule 335-3-8-.05(5).

2. Retired Unit Allowance Pool. The Retired Unit Allowance Pool shall be calculated each time NO_x allowances are allocated under subparagraph (2)(b) of this rule and shall equal the sum of the Baseline Allowances for all NO_x Budget units that have retired in accordance with rule 335-3-8-.05(5).

(d) Adjustment Ratios. To ensure that the total number of NO_x allowances allocated under paragraph (3) of this rule equals the number of tons of NO_x emissions in the State trading program budget, the following ratios may be applied to the calculated NO_x allowance allocations as appropriate.

1. Baseline Adjustment Ratio. The Baseline Adjustment Ratio is the total number of NO_x allowances in the Baseline Allowance Pool divided by the total number of NO_x allowances calculated for baseline NO_x Budget units for a control period prior to any adjustments.

2. Alternate Baseline Adjustment Ratio. If there are no New NO_x Budget Units for which allocations must be calculated, the Alternate Baseline Adjustment Ratio is the total number of tons of NO_x emissions in the State trading program budget divided by the total number of NO_x allowances calculated for baseline and replacement NO_x Budget units for a control period prior to any adjustments.

(e) Calculation of NO_x Allowances for Baseline NO_x Budget Units.

1. For each control period under subparagraph (2)(a) of this rule, the Department will allocate NO_x allowances to all baseline NO_x Budget units in accordance with the following procedures:

(i) The Department will allocate NO_x allowances to each NO_x Budget unit under rule 335-3-8-.05(4)(a)1. in an amount equaling 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. of this paragraph, multiplied by the ratio of the total number of tons of NO_x emissions in the State trading program budget divided by the total number of NO_x allowances calculated for baseline NO_x Budget units for a control period prior to any adjustments, and then rounded to the nearest whole NO_x allowance as appropriate.

(ii) The Department will allocate NO_x allowances to each NO_x Budget unit under rule 335-3-8-.05(4)(a)2. in an amount equaling 0.17 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. of this paragraph, multiplied by the ratio of the total number of tons of NO_x emissions in the State trading program budget divided by the total number of NO_x allowances calculated for baseline NO_x Budget units for a control period prior to any adjustments, and then rounded to the nearest whole NO_x allowance as appropriate.

2. For each control period under subparagraph (2)(b) of this rule, the Department will allocate NO_x allowances to all baseline NO_x Budget units in accordance with the following procedures:

(i) The Department will allocate NO_x allowances to each NO_x Budget unit under rule 335-3-8-.05(4)(a)1. in an amount equaling 0.15 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio or, if no new NO_x Budget units have been identified at the time allocations are calculated, the Alternate Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (h) of this paragraph where necessary.

(ii) The Department will allocate NO_x allowances to each NO_x Budget unit under rule 335-3-8-.05(4)(a)2. in an amount equaling 0.17 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio or, if no new NO_x Budget units have been identified at the time allocations are calculated, the Alternate Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (h) of this paragraph where necessary.

(f) Calculation of NO_x Allowances for Replacement NO_x Budget Units. For each control period under subparagraph (2)(b) of this rule, after calculating NO_x allowances for all baseline NO_x Budget units that have not retired in accordance with rule 335-3-8-.05(5), the Department will allocate NO_x allowances from the Retired Unit Allowance Pool to all replacement NO_x Budget units in accordance with the following procedures:

1. For each replacement NO_x Budget unit under rule 335-3-8-.05(4)(a)1. that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before March 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(b) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio or, if no new NO_x Budget units have been identified at the time allocations are calculated, the Alternate Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (i) of this paragraph where necessary.

2. For each replacement NO_x Budget unit under rule 335-3-8-.05(4)(a)2. that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before March 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(b) of this rule, the number of NO_x allowances allocated for each applicable control

period will be equal to 0.17 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio or, if no new NO_x Budget units have been identified at the time allocations are calculated, the Alternate Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (i) of this paragraph where necessary.

(g) Calculation of NO_x Allowances for New NO_x Budget Units. For each control period under subparagraph (2)(b) of this rule, after calculating NO_x allowances for all baseline NO_x Budget units that have not retired in accordance with rule 335-3-8-.05(5) and calculating NO_x allowances for all replacement NO_x Budget Units, the Department will allocate NO_x allowances remaining in the Retired Unit Allowance Pool to all new NO_x Budget units in accordance with the following procedures:

1. For each new NO_x Budget unit under rule 335-3-8-.05(4)(a)1. that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before March 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(b) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (j) of this paragraph where necessary.

2. For each new NO_x Budget unit under rule 335-3-8-.05(4)(a)2. that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before March 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(b) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.17 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)2. or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances may be further adjusted in accordance with subparagraph (j) of this paragraph where necessary.

(h) Adjustment of Baseline NO_x Allowance Allocations. If NO_x allowances remain in the Retired Unit Allowance Pool after allocations are made to all replacement and new NO_x Budget units in accordance with subparagraphs (f) and (g) of this paragraph, these NO_x allowances will be allocated on a pro rata basis to the baseline NO_x Budget units for the applicable control periods.

(i) Adjustment of Replacement NO_x Allowance Allocations. If the total number of calculated NO_x allowances allocated to all replacement NO_x Budget

~~units under subparagraph (f) of this paragraph exceeds the number of NOx allowances in the Retired Unit Allowance Pool, each unit's allocation will be further adjusted by multiplying by the ratio of the number of NOx allowances in the Retired Unit Allowance Pool divided by the total number of NOx allowance allocations to all replacement NOx Budget units under subparagraph (f) of this paragraph so that the number of NOx allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted NOx allowance allocations will be rounded to the nearest ton, as appropriate.~~

~~(j) Adjustment of New NOx Allowance Allocations. If the total number of calculated NOx allowances allocated to all new NOx Budget units under subparagraph (f) of this paragraph exceeds the number of NOx allowances remaining in the Retired Unit Allowance Pool after allocation to replacement NOx Budget units, each unit's allocation will be further adjusted by multiplying by the ratio of the number of NOx allowances remaining in the Retired Unit Allowance Pool after allocation to replacement NOx Budget units divided by the total number of NOx allowance allocations to new replacement NOx Budget units under subparagraph (f) of this paragraph so that the total number of NOx allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted NOx allowance allocations will be rounded to the nearest ton, as appropriate.~~

~~(k) NOx allowances allocated to baseline NOx Budget units based on heat inputs determined in accordance with subparagraph (b)1.(ii) of this paragraph shall not be banked, as described under rule 335-3-8-.10(6), or transferred, as described under rule 335-3-8-.11, by the NOx Budget unit to which the NOx allowances were allocated if the unit does not commence operation prior to or during the control period for which NOx allowances were allocated. The NOx allowances will be transferred by the Department pro rata to baseline NOx Budget units that were allocated NOx allowances in accordance with subparagraphs (b)1.(i) of this paragraph. By November 1 of the same year, the Department shall notify the Administrator of the appropriate NOx allowance transfers.~~

~~(l) NOx allowances allocated to new NOx Budget units based on heat inputs determined in accordance with subparagraphs (b)2.(vi) or (b)3.(v) of this paragraph shall not be banked, as described under rule 335-3-8-.10(6), or transferred, as described under rule 335-3-8-.11, by the NOx Budget unit to which the NOx allowances were allocated if the unit does not commence operation prior to or during the control period for which NOx allowances were allocated. The NOx allowances will be transferred by the Department pro rata to NOx Budget units that were allocated NOx allowances in accordance with subparagraphs (b)2.(i) through (v) or (b)3.(i) through (iv) of this paragraph. By November 1 of the same year, the Department shall notify the Administrator of the appropriate NOx allowance transfers.~~

~~(m) NOx allowances will not be allocated to NOx Budget units that retire under 335-3-8-.05(5) prior to the date NOx allowance allocations are submitted to the Administrator under subparagraphs (2)(a) or (2)(b).~~

(n) The total NO_x allowances allocated for any control period in accordance with subparagraphs 335-3-8-.09(3)(e), (f), and (g) shall not exceed the State Trading Program Budget as determined by the applicable, approved State Implementation Plan.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended:

335-3-8-.10 REPEAL ~~NO_x Allowance Tracking System.~~ Reserved.

~~(1) NO_x Allowance Tracking System accounts.~~

~~(a) Nature and function of compliance accounts and overdraft accounts. Consistent with subparagraph (2)(a) of this rule, the Administrator will establish one compliance account for each NO_x Budget unit and one overdraft account for each source with two or more NO_x Budget units. Allocations of NO_x allowances pursuant to rule 335-3-8-.09 or rule 335-3-8-.13(9) and deductions or transfers of NO_x allowances pursuant to rules 335-3-8-.08(2), 335-3-8-.10(7), 335-3-8-.11, or 335-3-8-.13 will be recorded in the compliance accounts or overdraft accounts in accordance with this rule.~~

~~(b) Nature and function of general accounts. Consistent with paragraph (2) of this rule, the Administrator will establish, upon request, a general account for any person. Transfers of allowances pursuant to rule 335-3-8-.11 will be recorded in the general account in accordance with this rule.~~

~~(2) Establishment of accounts.~~

~~(a) Compliance accounts and overdraft accounts. Upon receipt of a complete account certificate of representation under rule 335-3-8-.06(4), the Administrator will establish:~~

~~1. A compliance account for each NO_x Budget unit for which the account certificate of representation was submitted; and~~

~~2. An overdraft account for each source for which the account certificate of representation was submitted and that has two or more NO_x Budget units.~~

~~(b) General accounts.~~

~~1. Any person may apply to open a general account for the purpose of holding and transferring allowances. A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:~~

~~(i) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NO_x authorized account representative and any alternate NO_x authorized account representative;~~

~~(ii) The NO_x authorized account representative, organization name and type of organization;~~

~~(iii) A list of all persons subject to a binding agreement for the NO_x authorized account representative or any alternate NO_x authorized account representative to represent their ownership interest with respect to the allowances held in the general account;~~

~~(iv) The following certification statement by the NO_x authorized account representative and any alternate NO_x authorized account representative: "I~~

certify that I was selected as the NO_X authorized account representative or the NO_X alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_X Budget Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account."

(v) The signature of the NO_X authorized account representative and any alternate NO_X authorized account representative and the dates signed.

(vi) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the account certificate of representation shall not be submitted to the Department nor the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

2. Upon receipt by the Administrator of a complete application for a general account under subparagraph (b)1. of this paragraph:

(i) The Administrator will establish a general account for the person or persons for whom the application is submitted.

(ii) The NO_X authorized account representative and any alternate NO_X authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to NO_X allowances held in the general account in all matters pertaining to the NO_X Budget Trading Program, not withstanding any agreement between the NO_X authorized account representative or any alternate NO_X authorized account representative and such person. Any such person shall be bound by any order or decision issued to the NO_X authorized account representative or any alternate NO_X authorized account representative by the Administrator or a court regarding the general account.

(iii) Each submission concerning the general account shall be submitted, signed, and certified by the NO_X authorized account representative or any alternate NO_X authorized account representative for the persons having an ownership interest with respect to NO_X allowances held in the general account. Each such submission shall include the following certification statement by the NO_X authorized account representative or any alternate NO_X authorized account representative any: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the NO_X allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my

~~knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

~~(iv) The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with subparagraph (b)2.(iii) of this paragraph above.~~

~~3. An application for a general account may designate one and only one NO_X authorized account representative and one and only one alternate NO_X authorized account representative who may act on behalf of the NO_X authorized account representative. The agreement by which the alternate NO_X authorized account representative is selected shall include a procedure for authorizing the alternate NO_X authorized account representative to act in lieu of the NO_X authorized account representative.~~

~~(i) Upon receipt by the Administrator of a complete application for a general account under subparagraph (b)1. of this paragraph, any representation, action, inaction, or submission by any alternate NO_X authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_X authorized account representative.~~

~~4. Changing the NOx authorized account representative and the alternate NO_X authorized account representative; changes in ownership interest.~~

~~(i) Changing the NOx authorized account representative. The NO_X authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_X authorized account representative prior to the time and date when the Administrator receives the superseding application for a general account shall be binding on the new NO_X authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.~~

~~(ii) Changing the alternate NO_X authorized account representative. The alternate NO_X authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_X authorized account representative prior to the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate NO_X authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.~~

~~(iii) Changes in ownership interest.~~

(I) In the event a new person having an ownership interest with respect to NO_X allowances in the general account is not included in the list of such persons in the account certificate of representation, such new person shall be deemed to be subject to and bound by the account certificate of representation, the representation, actions, inactions, and submissions of the NO_X authorized account representative and any alternate NO_X authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Administrator, as if the new person were included in such list.

(II) Within 30 days following any change in the persons having an ownership interest with respect to NO_X allowances in the general account, including the addition of persons, the NO_X authorized account representative or any alternate NO_X authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the NO_X allowances in the general account to include the change.

5. Once a complete application for a general account under subparagraph (b)1. of this paragraph has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under subparagraph (b)1. of this paragraph is received by the Administrator.

(i) Except as provided in subparagraph (b)4. of this paragraph, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO_X authorized account representative or any alternate NO_X authorized account representative for a general account shall affect any representation, action, inaction, or submission of the NO_X authorized account representative or any alternate NO_X authorized account representative or the finality of any decision or order by the Administrator under the NO_X Budget Trading Program.

(ii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the NO_X authorized account representative or any alternate NO_X authorized account representative for a general account, including private legal disputes concerning the proceeds of NO_X allowance transfers.

(c) Account identification. The Administrator will assign a unique identifying number to each account established under subparagraph (a) or (b) of this paragraph.

(3) NO_X Allowance Tracking System responsibilities of NO_X authorized account representative.

(a) Following the establishment of a NO_X Allowance Tracking System account, all submissions to the Administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of NO_X allowances in the account, shall be made only by the NO_X authorized account representative for the account.

(b) Authorized account representative identification. The Administrator will assign a unique identifying number to each NO_x authorized account representative.

(4) Recordation of NO_x allowance allocations.

(a) Upon approval of this Regional NO_x State Implementation Plan by the Administrator, the Administrator will record in the unit's compliance account NO_x allowances allocated to a NO_x Budget unit pursuant to rule 335-3-8-.09(2)(a), and in accordance with rule 335-3-8-.09(3) for the control periods in 2004, 2005, and 2006. Pursuant to subparagraph (d) of this paragraph, the year designated within each NO_x allowance's serial number shall determine the first control period in which the NO_x allowance is available for deduction for compliance.

(b) By May 1, 2004 and May 1 of every third year thereafter, the Administrator will record in the unit's compliance account all NO_x allowances allocated to a NO_x Budget unit pursuant to rule 335-3-8-.09(2)(b), and in accordance with rule 335-3-8-.09(3) for the control periods in the three years after the last year for which NO_x allowances were previously recorded. Pursuant to subparagraph (d) of this paragraph, the year designated within each NO_x allowance's serial number shall determine the first control period in which the NO_x allowance is available for deduction for compliance.

(c) For NO_x allowances allocated to a NO_x Budget opt-in unit under rule 335-3-8-.13(9)(a), the Administrator will record the NO_x allowances in the unit's compliance account by May 1 of the control period for which the NO_x allowances were allocated.

(d) Serial numbers for allocated NO_x allowances. When allocating NO_x allowances to a NO_x Budget unit and recording them in an account, the Administrator will assign each NO_x allowance a unique identification number that will include digits identifying the year for which the NO_x allowance is allocated.

(5) Compliance.

(a) NO_x allowance transfer deadline. The NO_x allowances are available to be deducted for compliance with a unit's NO_x Budget emissions limitation for a control period in a given year only if the NO_x allowances:

1. Were allocated for a control period in a prior year or the same year; and,

2. Are held in the unit's compliance account, or the overdraft account of the source where the unit is located, as of the NO_x allowance transfer deadline for that control period or are transferred into the compliance account or overdraft account by a NO_x allowance transfer correctly submitted for recordation under rule 335-3-8-.11(1) by the NO_x allowance transfer deadline for that control period.

(b) Deductions for compliance.

1. Following the recordation, in accordance with rule 335-3-8-.11(2), of NO_X allowance transfers submitted for recordation in the unit's compliance account or the overdraft account of the source where the unit is located by the NO_X allowance transfer deadline for a control period, the Administrator will deduct NO_X allowances available under subparagraph (a) of this paragraph to cover the unit's NO_X emissions (as determined in accordance with rule 335-3-8-.12) for the control period:

(i) From the compliance account; and,

(ii) Only if no more NO_X allowances available under subparagraph (a) of this paragraph remain in the compliance account, from the overdraft account. In deducting allowances for units at the source from the overdraft account, the Administrator will begin with the unit having the compliance account with the lowest NO_X Allowance Tracking System account number and end with the unit having the compliance account with the highest NO_X Allowance Tracking System account number (with account numbers sorted beginning with the left-most character and ending with the right-most character and the letter characters assigned values in alphabetical order and less than all numeric characters).

2. The Administrator will deduct NO_X allowances first under subparagraph (b)1.(i) of this paragraph and then under paragraph (b)1.(ii) of this paragraph:

(i) Until the number of NO_X allowances deducted for the control period equals the number of tons of NO_X emissions, determined in accordance with rule 335-3-8-.12, from the unit for the control period for which compliance is being determined, or

(ii) Until no more NO_X allowances available under subparagraph (a) of this paragraph remain in the respective account.

(c) Identification of NO_X allowances by serial number. The NO_X authorized account representative for each compliance account may identify by serial number the NO_X allowances to be deducted from the unit's compliance account under subparagraphs (b), (d), or (e) of this paragraph. Such identification shall be made in the compliance certification report submitted in accordance with rule 335-3-8-.08(1).

1. First-in, first-out. The Administrator will deduct NO_X allowances for a control period from the compliance account, in the absence of an identification or in the case of a partial identification of NO_X allowances by serial number under subparagraph (c) of this paragraph, or the overdraft account on a first-in, first-out (FIFO) accounting basis in the following order:

(i) Those NO_X allowances that were allocated for the control period to the unit under rules 335-3-8-.09 or 335-3-8-.13;

(ii) Those NO_x allowances that were allocated for the control period to any unit and transferred and recorded in the account pursuant to rule 335-3-8-.11, in order of their date of recordation;

(iii) Those NO_x allowances that were allocated for a prior control period to the unit under rules 335-3-8-.09 or 335-3-8-.13; and

(iv) Those NO_x allowances that were allocated for a prior control period to any unit and transferred and recorded in the account pursuant to rule 335-3-8-.11, in order of their date of recordation.

(d) Deductions for excess emissions.

1. After making the deductions for compliance under subparagraph (b) of this paragraph, the Administrator will deduct from the unit's compliance account or the overdraft account of the source where the unit is located a number of NO_x allowances, allocated for a control period after the control period in which the unit has excess emissions, equal to three times the number of the unit's excess emissions. The Administrator will deduct, for excess emissions for the 2008 control period, either NO_x Budget trading program allowances allocated for the 2009 control period or CAIR NO_x Ozone Season allowances allocated for the 2009 control period.

2. If the compliance account or overdraft account does not contain sufficient NO_x allowances, the Administrator will deduct the required number of NO_x allowances, regardless of the control period for which they were allocated, whenever NO_x allowances are recorded in either account.

3. Any allowance deduction required under subparagraph (d) of this paragraph shall not affect the liability of the owners and operators of the NO_x Budget unit for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the CAA or applicable State law. The following guidelines will be followed in assessing fines, penalties or other obligations:

(i) For purposes of determining the number of days of violation, if a NO_x Budget unit has excess emissions for a control period, each day in the control period (153 days) constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.

(ii) Each ton of excess emissions is a separate violation.

(e) Deductions for units sharing a common stack. In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned in accordance with rule 335-3-8-.12:

1. The NO_x authorized account representative of the units may identify the percentage of NO_x allowances to be deducted from each such unit's compliance account to cover the unit's share of NO_x emissions from the common stack for a control period. Such identification shall be made in the

~~compliance certification report submitted in accordance with rule 335-3-8-.08(1).~~

~~2. Notwithstanding subparagraph (b)2.(i) of this paragraph, the Administrator will deduct NO_x allowances for each such unit until the number of NO_x allowances deducted equals the unit's identified percentage (under subparagraph (e)1. of this paragraph) of the number of tons of NO_x emissions, as determined in accordance with rule 335-3-8-.12, from the common stack for the control period for which compliance is being determined or, if no percentage is identified, an equal percentage for each such unit.~~

~~(f) The Administrator will record in the appropriate compliance account or overdraft account all deductions from such an account pursuant to subparagraphs (b), (d), or (e) of this paragraph.~~

~~(6) Banking.~~

~~(a) NO_x allowances may be banked for future use or transfer in a compliance account, an overdraft account, or a general account, as follows:~~

~~1. Any NO_x allowance that is held in a compliance account, an overdraft account, or a general account will remain in such account unless and until the NO_x allowance is deducted or transferred under rules 335-3-8-.08(2), 335-3-8-.10(5) and (6), 335-3-8-.11, or 335-3-8-.13.~~

~~2. The Administrator will designate, as a "banked" NO_x allowance, any NO_x allowance that remains in a compliance account, an overdraft account, or a general account after the Administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to paragraph (5) of this rule (except deductions pursuant to subparagraph (5)(d)2. above) and that was allocated for that control period or a control period in a prior year.~~

~~(b) Each year starting in 2005, after the Administrator has completed the designation of banked NO_x allowances under subparagraph (a)2. of this paragraph and before May 1 of the year, the Administrator will determine the extent to which banked NO_x allowances may be used for compliance in the control period for the current year, as follows:~~

~~1. The Administrator will determine the total number of banked NO_x allowances held in compliance accounts, overdraft accounts, or general accounts.~~

~~2. If the total number of banked NO_x allowances determined, under subparagraph (b)1. of this paragraph, to be held in compliance accounts, overdraft accounts, or general accounts is less than or equal to 10% of the sum of the State trading program budgets for the control period for the States in which NO_x Budget units are located, any banked NO_x allowance may be deducted for compliance in accordance with paragraph (5) of this rule.~~

3. If the total number of banked NO_x allowances determined, under subparagraph (b)1. of this paragraph, to be held in compliance accounts, overdraft accounts, or general accounts exceeds 10% of the sum of the State trading program budgets for the control period for the States in which NO_x Budget units are located, any banked allowance may be deducted for compliance in accordance with paragraph (5) of this rule, except as follows:

(i) The Administrator will determine the following ratio: 0.10 multiplied by the sum of the State trading program budgets for the control period for the States in which NO_x Budget units are located and divided by the total number of banked NO_x allowances determined, under subparagraph (b)1. of this paragraph, to be held in compliance accounts, overdraft accounts, or general accounts.

(ii) The Administrator will multiply the number of banked NO_x allowances in each compliance account or overdraft account by the ratio determined in subparagraph (i) above. The resulting product is the number of banked NO_x allowances in the account that may be deducted for compliance in accordance with paragraph (5) of this rule. Any banked NO_x allowances in excess of the resulting product may be deducted for compliance in accordance with paragraph (5) of this rule, except that, if such NO_x allowances are used to make a deduction, two such NO_x allowances must be deducted for each deduction of one NO_x allowance required under paragraph (5) of this rule.

(c) For any NO_x Budget unit that reduces its NO_x emission rate in the 2001, 2002 or 2003 control period, the owner or operator of the unit may request early reduction credits, and the Department may allocate NO_x allowances by May 1, 2004 to the unit in accordance with the following requirements.

1. Each NO_x Budget unit for which the owner or operator requests any early reduction credits under subparagraph (c)4. of this paragraph shall monitor NO_x emissions in accordance with rule 335-3-8-.12 starting May 1 of the control period prior to the first control period for which such early reduction credits are requested and during each control period for which the early reduction credits are requested. The unit's monitoring system availability shall be not less than 90 percent, and the unit must be in compliance with any applicable State or Federal emissions or emissions related requirements, during the control period prior to the first control period for which such early reduction credits are requested. Early reduction credits may only be requested for emissions reductions that are not required by Alabama's State Implementation Plan or the Clean Air Act.

2. NO_x emission rate and heat input under subparagraphs (c)3. through 5. of this paragraph shall be determined in accordance with rule 335-3-8-.12.

3. Each NO_x Budget unit for which the owner or operator requests any early reduction credits under subparagraph (c)4. of this paragraph shall reduce its NO_x emission rate, for each control period for which early reduction credits are requested, to below the lesser of the NO_x emission rate required under 40

~~CFR 76, including emission averaging under 40 CFR 76.11, or ADEM Admin. Code r. 335-3-8-.03.~~

~~4. The NO_X authorized account representative of a NO_X Budget unit that meets the requirements of subparagraphs (c)1. and 3. of this paragraph may submit to the Department a request for early reduction credits for the unit based on NO_X emission rate reductions made by the unit in the control period for 2001, 2002 or 2003 in accordance with subparagraph (c)3. of this paragraph.~~

~~(i) Except as provided in subparagraph (c)4.(ii) below, in the early reduction credit request, the NO_X authorized account representative may request early reduction credits for such control period in an amount equal to the unit's heat input for such control period multiplied by the difference between the following:~~

~~(I) The unit's actual average NO_X emission rate in the ozone control period prior to the first ozone control period for which early reduction credits are requested; and,~~

~~(II) The unit's NO_X emission rate for the ozone control period in which the early reductions occurred, divided by 2000 lb/ton, and rounded to the nearest ton.~~

~~(ii) In the early reduction credit request for units subject to ADEM Admin. Code r. 335-3-8-.03, the NO_X authorized account representative may request early reduction credits for 2003 in an amount equal to the difference between the allowable NO_X emission rate per million BTU of heat input and the actual seasonal NO_X emission rate multiplied by the total heat input of the subject units in the 2003 ozone control period.~~

~~(iii) The early reduction credit request must be submitted, in a format specified by the Department, by October 31 of the year in which the NO_X emission rate reductions on which the request is based are made or such later date approved by the Department.~~

~~5. The Department will allocate NO_X allowances to NO_X Budget units meeting the requirements of subparagraphs (c)1. and 3. of this paragraph and covered by early reduction requests meeting the requirements of subparagraph (c)4.(ii) of this paragraph, in accordance with the following procedures:~~

~~(i) Upon receipt of each early reduction credit request, the Department will accept the request only if the requirements of subparagraphs (c)1., (c)3., and (c)4.(ii) of this paragraph as well as subparagraphs 335-3-8-.10(7)(b), (c), and (d) are met and, if the request is accepted, will make any necessary adjustments to the request to ensure that the amount of the early reduction credits requested meets the requirements of subparagraphs (c)2. and 4. of this paragraph.~~

~~(ii) If the State's compliance supplement pool has an amount of NO_X allowances not less than the number of early reduction credits in all accepted~~

~~early reduction credit requests for 2001 through 2003 (as adjusted under subparagraph (c)5.(i) of this paragraph), the Department will allocate to each NO_X Budget unit covered by such accepted requests one allowance for each early reduction credit requested (as adjusted under subparagraph (c)5.(i) of this paragraph).~~

~~(iii) If the State's compliance supplement pool has a smaller amount of NO_X allowances than the number of early reduction credits in all accepted early reduction credit requests for 2001 through 2003 (as adjusted under subparagraph (c)5.(i) of this paragraph), the Department will allocate NO_X allowances to each NO_X Budget unit covered by such accepted requests according to the following formula:~~

~~Unit's allocated early reduction credits = [(Unit's adjusted early reduction credits) / (Total adjusted early reduction credits requested by all units)] x (Available NO_X allowances from the State's compliance supplement pool) where:~~

~~"Unit's adjusted early reduction credits" is the number of early reduction credits for the unit for 2001 through 2003 in accepted early reduction credit requests, as adjusted under subparagraph (c)5.(i) of this paragraph.~~

~~"Total adjusted early reduction credits requested by all units" is the number of early reduction credits for all units for 2001 through 2003 in accepted early reduction credit requests, as adjusted under subparagraph (c)5.(i) of this paragraph.~~

~~"Available NO_X allowances from the State's compliance supplement pool" is the number of NO_X allowances in the State's compliance supplement pool and available for early reduction credits for 2001 through 2003.~~

~~6. By May 1, 2004, the Department will submit to the Administrator the allocations of NO_X allowances determined under subparagraph (c)5. of this paragraph. The Administrator will record such allocations to the extent that they are consistent with the requirements of subparagraphs (c)1. through 5. of this paragraph.~~

~~7. NO_X allowances recorded under subparagraph (c)6. of this paragraph may be deducted for compliance under paragraph (5) of this rule for the control periods in 2004 or 2005. Notwithstanding subparagraph (a) of this paragraph, the Administrator will deduct as retired any NO_X allowance that is recorded under subparagraph (c)6. of this paragraph and is not deducted for compliance in accordance with paragraph (5) of this rule for the control period in 2004 or 2005.~~

~~8. NO_X allowances recorded under subparagraph (c)6. of this paragraph are treated as banked allowances in 2005 for the purposes of subparagraphs (a) and (b) of this paragraph.~~

~~(7) Compliance Supplement Pool. The total number of allowances under the Compliance Supplement Pool will be determined upon promulgation of EPA's Phase II rules. The Department may issue the compliance supplement~~

~~pool to NO_x Budget units that implement emissions reductions during the ozone season beyond all applicable requirements in years prior to 2004 according to the following provisions:~~

~~(a) The Department shall complete the issuance process by no later than May 31, 2004.~~

~~(b) The emissions reduction may not be required by the Alabama SIP or be otherwise required by the CAA.~~

~~(c) The emissions reduction must be verified by the source as actually having occurred from May 1 through and including September 30 in any year in 2001 through 2003.~~

~~(d) Emissions reductions implemented by sources serving electric generators with a nameplate capacity greater than 25 MWe, or boilers, combustion turbines or combined cycle units with a maximum design heat input greater than 250 mmBTU/hr, must be quantified in accordance with rule 335-3-8-.12.~~

~~(e) The compliance supplement pool credits shall be available for the control periods of 2004 and 2005.~~

~~(f) Sources that receive credit according to the provisions of this rule, may trade the credit to other sources or persons in a NO_x Budget Trading Program established, and approved by the Administrator pursuant to 40 CFR, § 51.121, or the Federal NO_x Budget Trading Program promulgated under 40 CFR 97, pursuant to 40 CFR § 52.34.~~

~~(g) Notwithstanding other provisions regarding the distribution of allowances from the compliance supplement pool, operators of NOx Budget sources may receive allowances from the compliance supplement pool only to the extent that the total number of allowances issued to such operators does not exceed 40% of the total number of NOx allowances issued to that operator from the initial allowance allocation of all sources controlled by that operator.~~

~~(8) Account error. The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any NO_x Allowance Tracking System account. Within 10 business days of making such correction, the Administrator will notify the NO_x authorized account representative for the account.~~

~~(9) Closing of general accounts.~~

~~(a) The NO_x authorized account representative of a general account may instruct the Administrator to close the account by submitting a statement requesting deletion of the account from the NO_x Allowance Tracking System and by correctly submitting for recordation under rule 335-3-8-.11(1) an allowance transfer of all NO_x allowances in the account to one or more other NO_x Allowance Tracking System accounts.~~

(b) If a general account shows no activity for a period of a year or more and does not contain any NO_X allowances, the Administrator may notify the NO_X authorized account representative for the account that the account will be closed and deleted from the NO_X Allowance Tracking System following 20 business days after the notice is sent. The account will be closed after the 20-day period unless before the end of the 20-day period the Administrator receives a correctly submitted transfer of NO_X allowances into the account under rule 335-3-8-.11(1) or a statement submitted by the NO_X authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended: October 3, 2002; April 3, 2003; April 3, 2007.

335-3-8-.11 REPEAL ~~NO_x Allowance Transfers~~. Reserved.

~~(1) Submission of NO_x allowance transfers. The NO_x authorized account representative seeking recordation of a NO_x allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the NO_x allowance transfer shall include the following elements in a format specified by the Administrator:~~

~~(a) The numbers identifying both the transferor and transferee accounts;~~

~~(b) A specification by serial number of each NO_x allowance to be transferred; and~~

~~(c) The printed name and signature of the NO_x authorized account representative of the transferor account and the date signed.~~

~~(2) EPA recordation.~~

~~(a) Within 5 business days of receiving a NO_x allowance transfer, except as provided in subparagraph (b) of this paragraph, the Administrator will record a NO_x allowance transfer by moving each NO_x allowance from the transferor account to the transferee account as specified by the request, provided that:~~

~~1. The transfer is correctly submitted under paragraph (1) of this rule;~~

~~2. The transferor account includes each NO_x allowance identified by serial number in the transfer; and~~

~~3. The transfer meets all other requirements of this rule.~~

~~(b) A NO_x allowance transfer that is submitted for recordation following the NO_x allowance transfer deadline and that includes any NO_x allowances allocated for a control period prior to or the same as the control period to which the NO_x allowance transfer deadline applies will not be recorded until after completion of the process of recordation of NO_x allowance allocations in rule 335-3-8-.10(4)(b).~~

~~(c) Where a NO_x allowance transfer submitted for recordation fails to meet the requirements of subparagraph (a) of this paragraph, the Administrator will not record such transfer.~~

~~(3) Notification.~~

~~(a) Notification of recordation. Within 5 business days of recordation of a NO_x allowance transfer under rule 335-3-8-.11(2), the Administrator will notify each party to the transfer. Notice will be given to the NO_x authorized account representatives of both the transferor and transferee accounts.~~

(b) Notification of non-recordation. Within 10 business days of receipt of a NO_x allowance transfer that fails to meet the requirements of rule 335-3-8-.11(2)(a), the Administrator will notify the NO_x authorized account representatives of both accounts subject to the transfer of:

1. A decision not to record the transfer, and,

2. The reasons for such non-recordation.

(c) Nothing in this rule shall preclude the submission of a NO_x allowance transfer for recordation following notification of non-recordation.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended:

335-3-8-.12 REPEAL Monitoring and Reporting. Reserved.

(1) General requirements. The owners and operators, and to the extent applicable, the NO_X authorized account representative of a NO_X Budget unit, shall comply with the monitoring and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H. For purposes of complying with such requirements, the definitions in rule 335-3-8-.05(2) and in 40 CFR, § 72.2 shall apply, and the terms "affected unit", "designated representative", and "continuous emission monitoring system" (or "CEMS") in 40 CFR 75 shall be replaced by the terms "NO_X Budget unit", "NO_X authorized account representative", and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in rule 335-3-8-.05(2).

(a) Requirements for installation, certification, and data accounting. The owner or operator of each NO_X Budget unit must meet the following requirements. These provisions also apply to a unit for which an application for a NO_X Budget opt-in permit is submitted and not denied or withdrawn, as provided in rule 335-3-8-.13:

1. Install all monitoring systems required under this rule for monitoring NO_X mass. This includes all systems required to monitor NO_X emission rate, NO_X concentration, heat input, and flow, in accordance with 40 CFR, §§ 75.72 and 75.75.

2. Install all monitoring systems for monitoring heat input, if required under paragraph (7) of this rule for developing NO_X allowance allocations.

3. Successfully complete all certification tests required under paragraph (2) of this rule and meet all other provisions of this rule and 40 CFR 75 applicable to the monitoring systems under subparagraphs (a)1. and 2. of this paragraph.

4. Record, and report data from the monitoring systems under subparagraphs (a)1. and 2. of this paragraph.

(b) Compliance dates. The owner or operator must meet the requirements of subparagraphs (a)1. through (a)3. of this paragraph on or before the following dates and must record and report data on and after the following dates:

1. NO_X Budget units for which the owner or operator intends to apply for early reduction credits under rule 335-3-8-.10(6)(c), must comply with the requirements of this rule by May 1 of the control period prior to the control period for which such early reduction credits are requested.

2. Except for NO_X Budget units under subparagraph (b)1. above, NO_X Budget units under rule 335-3-8-.05(4) that commence operation before January 1, 2002, must comply with the requirements of this rule by May 1, 2003.

~~3. NO_x Budget units under rule 335-3-8-.05(4) that commence operation on or after January 1, 2002 and that report on an annual basis under subparagraph (5)(b) of this rule must comply with the requirements of this rule by the later of the following dates:~~

~~(i) May 1, 2003; or~~

~~(ii) The earlier of:~~

~~(I) 180 calendar days after the date on which the unit commences operation or,~~

~~(II) For units under rule 335-3-8-.05(4)(a)1., 90 unit operating days after the date on which the unit commences commercial operation.~~

~~4. NO_x Budget units under rule 335-3-8-.05(4) that commence operation on or after January 1, 2002 and that report on a control season basis under subparagraph (5)(b) of this rule must comply with the requirements of this rule by the later of the following dates:~~

~~(i) The earlier of:~~

~~(I) 180 calendar days after the date on which the unit commences operation or,~~

~~(II) For units under rule 335-3-8-.05(4)(a)1., 90 unit operating days after the date on which the unit commences commercial operation.~~

~~(ii) However, if the applicable deadline under subparagraph (b)4.(i) of this paragraph does not occur during a control period, May 1 immediately following the date determined in accordance with subparagraph (b)4.(i) of this paragraph.~~

~~5. For a NO_x Budget unit with a new stack or flue for which construction is completed after the applicable deadline under subparagraphs (b)1., (b)2. or (b)3. of this paragraph or rule 335-3-8-.13:~~

~~(i) 90 days after the date on which emissions first exit to the atmosphere through the new stack or flue;~~

~~(ii) However, if the unit reports on a control season basis under subparagraph (5)(d) of this rule and the applicable deadline under subparagraph (b)5.(i) of this paragraph does not occur during the control period, May 1 immediately following the applicable deadline in subparagraph (b)5.(i) of this paragraph.~~

~~6. For a unit for which an application for a NO_x Budget opt-in permit is submitted and not denied or withdrawn, the compliance dates specified under rule 335-3-8-.13.~~

~~(c) Reporting data prior to initial certification.~~

1. The owner or operator of a NO_X Budget unit that misses the certification deadline under subparagraph (b)1. is not eligible to apply for early reduction credits. The owner or operator of the unit becomes subject to the certification deadline under subparagraph (b)2. of this paragraph.

2. The owner or operator of a NO_X Budget unit under subparagraphs (b)3. or (b)4. of this paragraph must determine, record and report NO_X mass, heat input rate (if required for purposes of allocations) and any other values required to determine NO_X mass emissions (e.g. NO_X emission rate and heat input or NO_X concentration and stack flow) using the provisions of 40 CFR, § 75.70(g), from the date and hour that the unit starts operating until the date and hour on which the continuous emission monitoring system, excepted monitoring system under Appendix D or E of Part 75, or excepted monitoring methodology under § 75.19 is provisionally certified.

(d) Prohibitions.

1. No owner or operator of a NO_X Budget unit or a non-NO_X Budget unit monitored under 40 CFR, § 75.72(b)(2)(ii) shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with paragraph (6) of this rule.

2. No owner or operator of a NO_X Budget unit or a non-NO_X Budget unit monitored under 40 CFR, § 75.72(b)(2)(ii) shall operate the unit so as to discharge, or allow to be discharged, NO_X emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and 40 CFR 75, except as provided for in § 75.74.

3. No owner or operator of a NO_X Budget unit or a non-NO_X Budget unit monitored under 40 CFR, § 75.72(b)(2)(ii) shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_X mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule and 40 CFR 75 except as provided for in § 75.74.

4. No owner or operator of a NO_X Budget unit or a non-NO_X Budget unit monitored under 40 CFR, § 75.72(b)(2)(ii) shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system under this rule, except under any one of the following circumstances:

(i) During the period that the unit is covered by a retired unit exemption under rule 335-3-8-.05(5) that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this rule and 40 CFR 75, by the Department for use at

~~that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or~~

~~(iii) The NO_x authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with subparagraph (2)(b)2. below.~~

~~(2) Initial certification and recertification procedures.~~

~~(a) The owner or operator of a NO_x Budget unit that is subject to an Acid Rain emissions limitation shall comply with the initial certification and recertification procedures of 40 CFR 75, except that:~~

~~1. If, prior to January 1, 1998, the Administrator approved a petition under 40 CFR, § 75.17(a) or (b) for apportioning the NO_x emission rate measured in a common stack or a petition under 40 CFR, § 75.66 for an alternative to a requirement in 40 CFR, § 75.17, the NO_x authorized account representative shall resubmit the petition to the Administrator under subparagraph (6)(a) of this rule to determine if the approval applies under the NO_x Budget Trading Program.~~

~~2. For any additional CEMS required under the common stack provisions in 40 CFR, § 75.72, or for any NO_x concentration CEMS used under the provisions of 40 CFR, § 75.71(a)(2), the owner or operator shall meet the requirements of subparagraph (b) of this paragraph.~~

~~(b) The owner or operator of a NO_x Budget unit that is not subject to an Acid Rain emissions limitation shall comply with the following initial certification and recertification procedures, except that the owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR, § 75.19 shall also meet the requirements of subparagraph (c) of this paragraph and the owner or operator of a unit that qualifies to use an alternative monitoring system under Subpart E of 40 CFR 75 shall also meet the requirements of subparagraph (d) of this paragraph. The owner or operator of a NO_x Budget unit that is subject to an Acid Rain emissions limitation, but requires additional CEMS under the common stack provisions in 40 CFR, § 75.72, or that uses a NO_x concentration CEMS under 40 CFR, § 75.71(a)(2) also shall comply with the following initial certification and recertification procedures.~~

~~1. Requirements for initial certification. The owner or operator shall ensure that each monitoring system required by 40 CFR 75, Subpart H (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR, § 75.20. The owner or operator shall ensure that all applicable certification tests are successfully completed by the deadlines specified in subparagraph (1)(b) of this rule. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this part in a location where no such monitoring system was previously installed, initial certification according to 40 CFR, § 75.20 is required.~~

2. Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that the Administrator or the Department determines significantly affects the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the requirements of 40 CFR, § 75.21 or 40 CFR 75, Appendix B, the owner or operator shall recertify the monitoring system according to 40 CFR, § 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the Administrator or the Department determines to significantly change the stack flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system according to 40 CFR, § 75.20(b). Examples of changes which require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site.

3. Certification approval process for initial certifications and recertification.

(i) Notification of certification. The NO_x authorized account representative shall submit to the Department, and the appropriate EPA Regional Office, a written notice of the dates of certification in accordance with paragraph (4) of this rule.

(ii) Certification application. The NO_x authorized account representative shall submit to the Department a certification application for each monitoring system required under 40 CFR 75, Subpart H. A complete certification application shall include the information specified in 40 CFR 75, Subpart H.

(iii) Except for units using the low mass emission excepted methodology under 40 CFR, § 75.19, the provisional certification date for a monitor shall be determined using the procedures set forth in 40 CFR, § 75.20(a)(3). A provisionally certified monitor may be used under the NO_x Budget Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system or component thereof under subparagraph (b)3.(ii) of this paragraph. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR 75, will be considered valid quality assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of receipt of the complete certification application by the Department.

(iv) Certification application formal approval process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under subparagraph (b)3.(ii) of this paragraph. In the event the Department does not issue such a notice within such 120 day period, each monitoring system which meets the applicable performance requirements

of 40 CFR 75 and is included in the certification application will be deemed certified for use under the NO_x Budget Trading Program.

(I) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.

(II) Incomplete application notice. A certification application will be considered complete when all of the applicable information required to be submitted under subparagraph (b)3.(ii) of this paragraph has been received by the Department. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the NO_x authorized account representative must submit the additional information required to complete the certification application. If the NO_x authorized account representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under subparagraph (b)3.(iv)(III) of this paragraph.

(III) Disapproval notice. If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of this part, or if the certification application is incomplete and the requirement for disapproval under subparagraph (b)3.(iv)(II) of this paragraph has been met, the Department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in subparagraph (b)3.(v) of this paragraph for each monitoring system or component thereof which is disapproved for initial certification.

(IV) Audit decertification. The Department may issue a notice of disapproval of the certification status of a monitor in accordance with subparagraph (3)(b) of this rule.

(v) Procedures for loss of certification. If the Department issues a notice of disapproval of a certification application under subparagraph(b)3.(iv)(III) of this paragraph or a notice of disapproval of certification status under subparagraph (b)3.(iv)(IV) of this paragraph, then:

(I) The owner or operator shall substitute the following values, for each hour of unit operation during the period of invalid data specified under § 75.20(a)(4)(iii), § 75.20(b)(5), § 75.20(h)(4), or § 75.21(e) and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i):

I. For units that the owner or operator intends to monitor or monitors for NO_x emission rate and heat input rate or intends to determine or determines NO_x mass emissions using the low mass emission excepted

methodology under 40 CFR, § 75.19, the maximum potential NO_x emission rate and the maximum potential hourly heat input of the unit;

II. For units that the owner or operator intends to monitor or monitors for NO_x mass emissions using a NO_x pollutant concentration monitor and a flow monitor, the maximum potential concentration of NO_x and the maximum potential flow rate of the unit under Section 2.1 of Appendix A of 40 CFR 75;

(II) The NO_x authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with subparagraphs (b)3.(i) and (ii) of this paragraph; and

(III) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(c) Initial certification and recertification procedures for low mass emission units using the excepted methodologies under 40 CFR, § 75.19. The owner or operator of a gas-fired or oil-fired unit using the low mass emissions excepted methodology under 40 CFR, § 75.19 and not subject to an Acid Rain emissions limitation shall meet the applicable general operating requirements of 40 CFR, § 75.10, and the applicable requirements of 40 CFR, § 75.19. The owner or operator of such a unit shall also meet the applicable certification and recertification procedures of subparagraph (b) of this rule, except that the excepted methodology shall be deemed provisionally certified for use under the NO_x Budget Trading Program as of the following dates:

1. For a unit that does not have monitoring equipment initially certified or recertified for the NO_x Budget Trading Program as of the date on which the NO_x authorized account representative submits the certification application under § 75.19 for the unit, starting on the date of such submission until the completion of the period for the Department's review.

2. For a unit that has monitoring equipment initially certified or recertified for the NO_x Budget Trading Program as of the date on which the NO_x authorized account representative submits the certification application under § 75.19 for the unit, and that reports data on an annual basis under rule 335-3-8-.12(5)(d), starting January 1 of the year after the year of such submission until the completion of the period for the Department's review.

3. For a unit that has monitoring equipment initially certified or recertified for the NO_x Budget Trading Program as of the date on which the NO_x authorized account representative submits the certification application under § 75.19 for the unit, and that reports data on a control season basis under rule 335-3-8-.12(5)(d), starting May 1 of the control period after the year of such submission until the completion of the period for the Department's review.

(d) Certification/recertification procedures for alternative monitoring systems. The NO_x authorized account representative representing the owner or

operator of each unit applying to monitor using an alternative monitoring system approved by the Administrator and, if applicable, the Department under 40 CFR 75, Subpart E shall apply for certification to the Department prior to use of the system under the NO_x Trading Program. The NO_x authorized account representative shall apply for recertification following a replacement, modification or change according to the procedures in subparagraph (b) of this paragraph. The owner or operator of an alternative monitoring system shall comply with the notification and application requirements for certification according to the procedures specified in subparagraph (b)3. of this paragraph and 40 CFR, § 75.20(f).

(3) Out of control periods.

(a) Whenever any monitoring system fails to meet the quality assurance requirements of 40 CFR 75, Appendix B, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR 75.

(b) Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement under paragraph (2) of this rule or the applicable provisions 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department will issue a notice of disapproval of the certification status of such system or component. For the purposes of this subparagraph, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department revokes prospectively the certification status of the system or component. The data measured and recorded by the system or component shall not be considered valid quality assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests. The owner or operator shall follow the initial certification or recertification procedures in paragraph (2) of this rule for each disapproved system.

(4) Notifications. The NO_x authorized account representative for a NO_x Budget unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR, § 75.61, except that if the unit is not subject to an Acid Rain emissions limitation, the notification is only required to be sent to the Department.

(5) Recordkeeping and reporting.

(a) General provisions.

1. The NO_x authorized account representative shall comply with all recordkeeping and reporting requirements in this paragraph and with the requirements of rule 335-3-8-.06(1)(e).

2. If the NO_x authorized account representative for a NO_x Budget unit subject to an Acid Rain Emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR 75 and which includes data and information required under this rule or 40 CFR 75, Subpart H is not the same person as the designated representative or the alternative designated representative for the unit under 40 CFR 72, the submission must also be signed by the designated representative or the alternative designated representative.

(b) Monitoring plans.

1. The owner or operator of a unit subject to an Acid Rain emissions limitation shall comply with requirements of 40 CFR, § 75.62, except that the monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.

2. The owner or operator of a unit that is not subject to an Acid Rain emissions limitation shall comply with requirements of 40 CFR, § 75.62, except that the monitoring plan is only required to include the information required by 40 CFR 75, Subpart H.

(c) Certification applications. The NO_x authorized account representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under paragraph (2) of this rule including the information required under 40 CFR 75, Subpart H.

(d) Quarterly reports. The NO_x authorized account representative shall submit quarterly reports, as follows:

1. If a unit is subject to an Acid Rain emission limitation or if the owner or operator of the NO_x budget unit chooses to meet the annual reporting requirements of this rule, the NO_x authorized account representative shall submit a quarterly report for each calendar quarter beginning with:

(i) For units that elect to comply with the early reduction credit provisions under rule 335-3-8-.10(6)(c), the calendar quarter that includes the date of initial provisional certification under subparagraphs (2)(b)3.(iii) or (2)(c) of this rule. Data should be recorded and reported from the date and hour corresponding to the date and hour of provisional certification;

(ii) For units commencing operation prior to May 1, 2002 that are not required to certify monitors by the date under subparagraph (1)(b)1. of this rule, the earlier of the calendar quarter that includes the date of initial provisional certification under subparagraph (2)(b)3.(iii) or (2)(c) of this rule or, if the certification tests are not completed by May 1, 2003, the partial calendar quarter from May 1, 2003 through June 30, 2003. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour on May 1, 2003; or

(iii) For a unit that commences operation on or after May 1, 2002, the calendar quarter in which the unit commences operation, data shall be

reported from the date and hour corresponding to when the unit commenced operation.

2. If a NO_X budget unit is not subject to an Acid Rain emission limitation, then the NO_X authorized account representative shall either:

(i) Meet all of the requirements of 40 CFR 75 related to monitoring and reporting NO_X mass emissions during the entire year and meet the reporting deadlines specified in subparagraph (d)1. of this paragraph; or

(ii) Submit quarterly reports only for the periods from the earlier of May 1 or the date and hour that the owner or operator successfully completes all of the recertification tests required under 40 CFR, § 75.74(d)(3) through September 30 of each year in accordance with the provisions of 40 CFR, § 75.74(c)(6). The NO_X authorized account representative shall submit a quarterly report for each calendar quarter, beginning with:

(I) For units that elect to comply with the early reduction credit provisions under rule 335-3-8-.10(6)(c), the calendar quarter that includes the date of initial provisional certification under subparagraphs (2)(b)3.(iii) or (2)(c) of this rule. Data should be recorded and reported from the date and hour corresponding to the date and hour of provisional certification;

(II) For units commencing operation prior to May 1, 2002 that are not required to certify monitors by the date under subparagraph (1)(b)1. of this rule, the earlier of the calendar quarter that includes the date of initial provisional certification under subparagraph (2)(b)3.(iii) or (2)(c) of this rule, or if the certification tests are not completed by May 1, 2003, the partial calendar quarter from May 1, 2003 through June 30, 2003. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1, 2003; or

(III) For units that commence operation on or after May 1, 2002 during the control period, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commenced operation; or

(IV) For units that commence operation on or after May 1, 2002 and before May 1 of the year in which the unit commences operation, the earlier of the calendar quarter that includes the date of initial provisional certification under subparagraph (2)(b)3.(iii) or (2)(c) of this rule or, if the certification tests are not completed by May 1 of the year in which the unit commences operation, May 1 of the year in which the unit commences operation. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1 of the year after the unit commences operation.

(V) For units that commence operation on or after May 1, 2002 and after September 30 of the year in which the unit commences operation, the earlier of the calendar quarter that includes the date of initial provisional certification

~~under subparagraph (2)(b)3.(iii) or (2)(c) of this rule or, if the certification tests are not completed by May 1 of the year after the unit commences operation, May 1 of the year after the unit commences operation. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour of May 1 of the year after the unit commences operation.~~

~~3. The NO_X authorized account representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75 and 40 CFR, § 75.64.~~

~~(i) For units subject to an Acid Rain Emissions limitation, quarterly reports shall include all of the data and information required in 40 CFR 75, Subpart H for each NO_X Budget unit (or group of units using a common stack) as well as information required in 40 CFR 75, Subpart G.~~

~~(ii) For units not subject to an Acid Rain Emissions limitation, quarterly reports are only required to include all of the data and information required in 40 CFR 75, Subpart H for each NO_X Budget unit (or group of units using a common stack).~~

~~4. Compliance certification. The NO_X authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:~~

~~(i) The monitoring data submitted were recorded in accordance with the applicable requirements of this rule and 40 CFR 75, including the quality assurance procedures and specifications; and~~

~~(ii) For a unit with add-on NO_X emission controls and for all hours where data are substituted in accordance with 40 CFR, § 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the monitoring plan and the substitute values do not systematically underestimate NO_X emissions; and~~

~~(iii) For a unit that is reporting on a control period basis under subparagraph (d) of this paragraph, the NO_X emission rate and NO_X concentration values substituted for missing data under 40 CFR 75, Subpart D are calculated using only values from a control period and do not systematically underestimate NO_X emissions.~~

~~(6) Petitions.~~

~~(a) The NO_X authorized account representative of a NO_X Budget unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR, § 75.66 to the Administrator requesting approval to apply an alternative to any requirement of this rule.~~

1. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent that the petition is approved by the Administrator, in consultation with the Department.

2. Notwithstanding subparagraph (a)1. of this paragraph, if the petition requests approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR, § 75.72, the petition is governed by subparagraph (b) of this paragraph.

(b) The NO_X authorized account representative of a NO_X Budget unit that is not subject to an Acid Rain emissions limitation may submit a petition under 40 CFR, § 75.66 to the Department and the Administrator requesting approval to apply an alternative to any requirement of this rule.

1. The NO_X authorized account representative of a NO_X Budget unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR, § 75.66 to the Department and the Administrator requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR, § 75.72 or a NO_X concentration CEMS used under 40 CFR, § 75.71(a)(2).

2. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent the petition under subparagraph (b) of this paragraph is approved by both the Department and the Administrator.

(7) Additional requirements to provide heat input data for allocations purposes.

(a) The owner or operator of a unit that elects to monitor and report NO_X mass emissions using a NO_X concentration system and a flow system shall also monitor and report heat input at the unit level using the procedures set forth in 40 CFR 75.

(b) The owner or operator of a unit that elects to monitor and report NO_X mass emissions using a NO_X concentration system and a flow system shall also monitor and report heat input at the unit level using the procedures set forth in 40 CFR 75 for any source that is applying for early reduction credits under rule 335-3-8-.10(6).

(8) Alabama emission reporting requirements for NO_X Budget Units.

(a) The owner or operator of a NO_X budget unit under rule 335-3-8-.05(4) shall submit NO_X ozone season emissions data as follows:

1. Annual reporting. For each NO_X budget unit, beginning with emission year 2004 and every year thereafter, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR, §§ 51.122(c)(1) and (2) must be submitted to the Department.

2. Triennial reporting. For each NO_X budget unit, beginning with emission year 2005 and every third year thereafter, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR, § 51.122(c)(3) must be submitted to the Department.

3. Year 2003 reporting. For each NO_X budget unit, by March 31, 2004, the data specified in 40 CFR, § 51.122(c)(3) must be submitted to the Department.

4. Year 2007 reporting. For each NO_X budget unit, by March 31, 2008, the data specified in 40 CFR, § 51.122(c)(3) must be submitted to the Department.

(b) The data required under subparagraph (a) of this paragraph shall be submitted electronically to the Department in a format prescribed and provided by the Department.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-28-14, 22-28-19, and 22-28-20.
History: Effective Date: April 6, 2001.
Amended: April 3, 2003.

335-3-8-.13 REPEAL ~~Individual Unit Opt-ins.~~ Reserved.

~~(1) Applicability. A unit that is in the Counties of Autauga, Bibb, Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, Dallas, Dekalb, Elmore, Etowah, Fayette, Franklin, Greene, Hale, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Lee, Limestone, Macon, Madison, Marion, Marshall, Morgan, Perry, Pickens, Randolph, Russell, Shelby, St. Clair, Sumter, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston, is not a NO_X Budget unit under rule 335-3-8-.05(4)(a), vents all of its emissions to a stack, and is operating, may qualify, under this rule, to become a NO_X Budget opt-in source. A unit that is a NO_X Budget unit, is covered by a retired unit exemption under rule 335-3-8-.05(5) that is in effect, or is not operating is not eligible to become a NO_X Budget opt-in source.~~

~~(2) General. Except otherwise as provided in this rule, a NO_X Budget opt-in source shall be treated as a NO_X Budget unit for purposes of applying rules 335-3-8-.05 through 335-3-8-.08 and 335-3-8-.10 through 335-3-8-.13.~~

~~(3) NO_X authorized account representative. A unit for which an application for a NO_X Budget opt-in permit is submitted and not denied or withdrawn, or a NO_X Budget opt-in source, located at the same source as one or more NO_X Budget units, shall have the same NO_X authorized account representative as such NO_X Budget units.~~

~~(4) Applying for NO_X Budget opt-in permit.~~

~~(a) Applying for initial NO_X Budget opt-in permit. In order to apply for an initial NO_X Budget opt-in permit, the NO_X authorized account representative of a unit qualified under paragraph (1) of this rule may submit to the Department at any time, except as provided under paragraph (7)(g) of this rule:~~

~~1. A complete NO_X Budget permit application under rule 335-3-8-.07(3);~~

~~2. A monitoring plan submitted in accordance with rule 335-3-8-.12; and~~

~~3. A complete account certificate of representation under rule 335-3-8-.06(4), if no NO_X authorized account representative has been previously designated for the unit.~~

~~(b) Duty to reapply. The NO_X authorized account representative of a NO_X Budget opt-in source shall submit a complete NO_X Budget permit application under rule 335-3-8-.07(3) to renew the NO_X Budget opt-in permit in accordance with rule 335-3-8-.07(2)(d) and, if applicable, an updated monitoring plan in accordance with rule 335-3-8-.12.~~

~~(5) Opt-in process. The Department will issue or deny a NO_X Budget opt-in permit for a unit for which an initial application for a NO_X Budget opt-in permit under paragraph (4) above is submitted, in accordance with rule 335-3-8-.07(1) and the following:~~

(a) Interim review of monitoring plan. The Department will determine, on an interim basis, the sufficiency of the monitoring plan accompanying the initial application for a NO_x Budget opt-in permit under paragraph (4) above. A monitoring plan is sufficient, for purposes of interim review, if the plan appears to contain information demonstrating that the NO_x emissions rate and heat input of the unit are monitored and reported in accordance with rule 335-3-8-.12. A determination of sufficiency shall not be construed as acceptance or approval of the unit's monitoring plan.

(b) If the Department determines that the unit's monitoring plan is sufficient under subparagraph (a) of this paragraph and after completion of monitoring system certification under rule 335-3-8-.12, the NO_x emissions rate and the heat input of the unit shall be monitored and reported in accordance with rule 335-3-8-.12 for one full control period during which monitoring system availability is not less than 90 percent and during which the unit is in full compliance with any applicable State or Federal emissions or emissions related requirements. Solely for purposes of applying the requirements in the prior sentence, the unit shall be treated as a "NO_x Budget unit" prior to issuance of a NO_x Budget opt-in permit covering the unit.

(c) Based on the information monitored and reported under subparagraph (b) of this paragraph above, the unit's baseline heat rate shall be calculated as the unit's total heat input (in mmBtu) for the control period and the unit's baseline NO_x emissions rate shall be calculated as the unit's total NO_x emissions (in lb) for the control period divided by the unit's baseline heat rate.

(d) After calculating the baseline heat input and the baseline NO_x emissions rate for the unit under subparagraph (c) of this paragraph, the Department will serve a draft NO_x Budget opt-in permit on the NO_x authorized account representative of the unit.

(e) Confirmation of intention to opt in. Within 20 days after the issuance of the draft NO_x Budget opt-in permit, the NO_x authorized account representative of the unit must submit to the Department a confirmation of the intention to opt in the unit or a withdrawal of the application for a NO_x Budget opt-in permit under paragraph (4) above. The Department will treat the failure to make a timely submission as a withdrawal of the NO_x Budget opt-in permit application.

(f) Issuance of draft NO_x Budget opt-in permit. If the NO_x authorized account representative confirms the intention to opt in the unit under subparagraph (e) of this paragraph, the Department will issue the draft NO_x Budget opt-in permit in accordance with rule 335-3-8-.07(1).

(g) Notwithstanding subparagraphs (a) through (f) of this paragraph, if at any time before issuance of a draft NO_x Budget opt-in permit for the unit, the Department determines that the unit does not qualify as a NO_x Budget opt-in source under paragraph (1) of this rule, the Department will issue a draft

denial of a NO_X Budget opt-in permit for the unit in accordance with rule 335-3-8-.07(1).

(h) Withdrawal of application for NO_X Budget opt-in permit. A NO_X authorized account representative of a unit may withdraw its application for a NO_X Budget opt-in permit under paragraph (4) of this rule at any time prior to the issuance of the final NO_X Budget opt-in permit. Once the application for a NO_X Budget opt-in permit is withdrawn, a NO_X authorized account representative wanting to reapply must submit a new application for a NO_X Budget permit under paragraph (4) of this rule.

(i) Effective date. The effective date of the initial NO_X Budget opt-in permit shall be May 1, with the exception of the year 2004 in which case the date would be May 31, of the first control period starting after the issuance of the initial NO_X Budget opt-in permit by the Department. The unit shall be a NO_X Budget opt-in source and a NO_X Budget unit as of the effective date of the initial NO_X Budget opt-in permit.

(6) NO_X Budget opt-in permit contents.

(a) Each NO_X Budget opt-in permit (including any draft or proposed NO_X Budget opt-in permit, if applicable) will contain all elements required for a complete NO_X Budget opt-in permit application under rule 335-3-8-.07(3).

(b) Each NO_X Budget opt-in permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.05(2) and, upon recordation by the Administrator under rules 335-3-8-.10, 335-3-8-.11, or 335-3-8-.13, every allocation, transfer, or deduction of NO_X allowances to or from the compliance accounts of each NO_X Budget opt-in source covered by the NO_X Budget opt-in permit or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located.

(7) Withdrawal from NO_X Budget Trading Program.

(a) Requesting withdrawal. To withdraw from the NO_X Budget Trading Program, the NO_X authorized account representative of a NO_X Budget opt-in source shall submit to the Department a request to withdraw effective as of a specified date prior to May 1 or after September 30. The submission shall be made no later than 90 days prior to the requested effective date of withdrawal.

(b) Conditions for withdrawal. Before a NO_X Budget opt-in source covered by a request under subparagraph (a) of this paragraph may withdraw from the NO_X Budget Trading Program and the NO_X Budget opt-in permit may be terminated under subparagraph (c) of this paragraph, the following conditions must be met:

1. For the control period immediately before the withdrawal is to be effective, the NO_X authorized account representative must submit or must have submitted to the Department an annual compliance certification report in accordance with rule 335-3-8-.08(1).

2. If the NO_X Budget opt-in source has excess emissions for the control period immediately before the withdrawal is to be effective, the Administrator will deduct or has deducted from the NO_X Budget opt-in source's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, the full amount required under rule 335-3-8-.10(5)(d) for the control period.

3. After the requirements for withdrawal under subparagraphs (b)1. and 2. of this paragraph are met, the Administrator will deduct from the NO_X Budget opt-in source's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, NO_X allowances equal in number to and allocated for the same or a prior control period as any NO_X allowances allocated to that source under paragraph (9) of this rule for any control period for which the withdrawal is to be effective. The Administrator will close the NO_X Budget opt-in source's compliance account and will establish, and transfer any remaining allowances to, a new general account for the owners and operators of the NO_X Budget opt-in source. The NO_X authorized account representative for the NO_X Budget opt-in source shall become the NO_X authorized account representative for the general account.

(c) A NO_X Budget opt-in source that withdraws from the NO_X Budget Trading Program shall comply with all requirements under the NO_X Budget Trading Program concerning all years for which such NO_X Budget opt-in source was a NO_X Budget opt-in source, even if such requirements arise or must be complied with after the withdrawal takes effect.

(d) Notification.

1. After the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are met (including deduction of the full amount of NO_X allowances required), the Department will issue a notification to the NO_X authorized account representative of the NO_X Budget opt-in source of the acceptance of the withdrawal of the NO_X Budget opt-in source as of a specified effective date that is after such requirements have been met and that is prior to May 1 or after September 30.

2. If the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are not met, the Department will issue a notification to the NO_X authorized account representative of the NO_X Budget opt-in source that the NO_X Budget opt-in source's request to withdraw is denied. If the NO_X Budget opt-in source's request to withdraw is denied, the NO_X Budget opt-in source shall remain subject to the requirements for a NO_X Budget opt-in source.

(e) Permit amendment. After the Department issues a notification under subparagraph (d)1. of this paragraph that the requirements for withdrawal have been met, the Department will revise the NO_X Budget permit covering the NO_X Budget opt-in source to terminate the NO_X Budget opt-in permit as of the effective date specified under subparagraph (d)1. of this paragraph. A NO_X Budget opt-in source shall continue to be a NO_X Budget opt-in source until the effective date of the termination.

(f) Reapplication upon failure to meet conditions of withdrawal. If the Department denies the NO_x Budget opt-in source's request to withdraw, the NO_x authorized account representative may submit another request to withdraw in accordance with subparagraphs (a) and (b) of this paragraph.

(g) Ability to return to the NO_x Budget Trading Program. Once a NO_x Budget opt-in source withdraws from the NO_x Budget Trading Program and its NO_x Budget opt-in permit is terminated under this paragraph, the NO_x authority account representative may not submit another application for a NO_x Budget opt-in permit under paragraph (4) of this rule for the unit prior to the date that is 4 years after the date on which the terminated NO_x Budget opt-in permit became effective.

(8) Change in regulatory status.

(a) Notification. When a NO_x Budget opt-in source becomes a NO_x Budget unit under rule 335-3-8-.05(4)(a), the NO_x authorized account representative shall notify in writing the Department and the Administrator of such change in the NO_x Budget opt-in source's regulatory status, within 30 days of such change.

(b) Department's and Administrator's action.

1. When the NO_x Budget opt-in source becomes a NO_x Budget unit under rule 335-3-8-.05(4), the Department will revise the NO_x Budget opt-in source's NO_x Budget opt-in permit to meet the requirements of a NO_x Budget permit under rule 335-3-8-.07(4) as of an effective date that is the date on which such NO_x Budget opt-in source becomes a NO_x Budget unit under rule 335-3-8-.05(4).

(i) The Administrator will deduct from the compliance account for the NO_x Budget unit under subparagraph (b)1. of this paragraph, or the overdraft account of the NO_x Budget source where the unit is located, NO_x allowances equal in number to and allocated for the same or a prior control period as follows:

(I) Any NO_x allowances allocated to the NO_x Budget unit (as a NO_x Budget opt-in source) under paragraph (9) of this rule for any control period after the last control period during which the unit's NO_x Budget opt-in permit was effective; and

(II) If the effective date of the NO_x Budget permit revision under subparagraph (b)1. of this paragraph is during a control period, the NO_x allowances allocated to the NO_x Budget unit (as a NO_x Budget opt-in source) under paragraph (9) of this rule for the control period multiplied by the ratio of the number of days, in the control period, starting with the effective date of the permit revision under subparagraph (b)1. of this paragraph, divided by the total number of days in the control period.

(ii) The NO_x authorized account representative shall ensure that the compliance account of the NO_x Budget unit under subparagraph (b)1. of this

~~paragraph, or the overdraft account of the NO_X Budget source where the unit is located, includes the NO_X allowances necessary for completion of the deduction under subparagraph (b)1.(i) of this paragraph. If the compliance account or overdraft account does not contain sufficient NO_X allowances, the Administrator will deduct the required number of NO_X allowances, regardless of the control period for which they were allocated, whenever NO_X allowances are recorded in either account.~~

~~(iii) For every control period during which the NO_X Budget permit revised under subparagraph (b)1. of this paragraph is effective, the NO_X Budget unit under subparagraph (b)1. of this paragraph will be treated, solely for purposes of NO_X allowance allocations under rule 335-3-8-.09(3), as a unit that commenced operation on the effective date of the NO_X Budget permit revision under subparagraph (b)1. of this paragraph and will be allocated NO_X allowances under rule 335-3-8-.09(3).~~

~~(iv) Notwithstanding subparagraph (b)1.(iii) above, if the effective date of the NO_X Budget permit revision under subparagraph (b)1. of this paragraph is during a control period, the following number of NO_X allowances will be allocated to the NO_X Budget unit under subparagraph (b)1. of this paragraph under rule 335-3-8-.09 for the control period: the number of NO_X allowances otherwise allocated to the NO_X Budget unit under rule 335-3-8-.09 for the control period multiplied by the ratio of the number of days, in the control period, starting with the effective date of the permit revision under subparagraph (b)1. of this paragraph, divided by the total number of days in the control period.~~

~~2. When the NO_X authorized account representative of a NO_X Budget opt-in source does not renew its NO_X Budget opt-in permit under subparagraph (4)(b) of this rule, the Administrator will deduct from the NO_X Budget opt-in unit's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, NO_X allowances equal in number to and allocated for the same or a prior control period as any NO_X allowances allocated to the NO_X Budget opt-in source under paragraph (9) of this rule for any control period after the last control period for which the NO_X Budget opt-in permit is effective. The NO_X authorized account representative shall ensure that the NO_X Budget opt-in source's compliance account or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located includes the NO_X allowances necessary for completion of such deduction. If the compliance account or overdraft account does not contain sufficient NO_X allowances, the Administrator will deduct the required number of NO_X allowances, regardless of the control period for which they were allocated, whenever NO_X allowances are recorded in either account.~~

~~(i) After the deduction under subparagraph (b)2. of this paragraph is completed, the Administrator will close the NO_X Budget opt-in source's compliance account. If any NO_X allowances remain in the compliance account after completion of such deduction and any deduction under rule 335-3-8-.10(5), the Administrator will close the NO_X Budget opt-in source's compliance account and will establish, and transfer any remaining allowances~~

to, a new general account for the owners and operators of the NO_x Budget opt-in source. The NO_x authorized account representative for the NO_x Budget opt-in source shall become the NO_x authorized account representative for the general account.

(9) NO_x allowance allocations to opt-in units.

(a) NO_x allowance allocation.

1. By December 31 immediately before the first control period for which the NO_x Budget opt-in permit is effective, the Department will allocate NO_x allowances to the NO_x Budget opt-in source and submit to the Administrator the allocation for the control period in accordance with subparagraph (b) of this paragraph.

2. By no later than December 31, after the first control period for which the NO_x Budget opt-in permit is in effect, and December 31 of each year thereafter, the Department will allocate NO_x allowances to the NO_x Budget opt-in source, and submit to the Administrator allocations for the next control period, in accordance with subparagraph (b) of this paragraph.

(b) For each control period for which the NO_x Budget opt-in source has an approved NO_x Budget opt-in permit, the NO_x Budget opt-in source will be allocated NO_x allowances in accordance with the following procedures:

1. The heat input (in mmBtu) used for calculating NO_x allowance allocations will be the lesser of:

(i) The NO_x Budget opt-in source's baseline heat input determined pursuant to subparagraph (5)(c) of this rule; or

(ii) The NO_x Budget opt-in source's heat input, as determined in accordance with rule 335-3-8-.12, for the control period in the year prior to the year of the control period for which the NO_x allocations are being calculated.

2. The Department will allocate NO_x allowances to the NO_x Budget opt-in source in an amount equaling the heat input (in mmBtu) determined under subparagraph (b)1. of this paragraph multiplied by the lesser of:

(i) The NO_x Budget opt-in source's baseline NO_x emissions rate (in lb/mmBtu) determined pursuant to subparagraph (5)(c) of this rule; or

(ii) The most stringent State or Federal NO_x emissions limitation applicable to the NO_x Budget opt-in source during the control period.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 6, 2001.
Amended:

335-3-8-.14 ~~New Combustion Sources.~~Reserved.

~~(1) No person shall cause or permit emissions of nitrogen oxides from a new gas-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.20 pounds per million BTU of heat input per hour.~~

~~(2) No person shall cause or permit emissions of nitrogen oxides from a new oil-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.30 pounds per million BTU of heat input per hour.~~

~~(3) No person shall cause or permit emission of nitrogen oxides from a new coal-fired boiler with a capacity of 250 million BTU per hour or more in excess of 0.7 pounds per million BTU of heat input per hour.~~

~~(4) For purposes of this rule, the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of nitrogen oxides that passes through a stack or stacks.~~

Author: ~~James W. Cooper and John E. Daniel.~~
Statutory Authority: ~~Code of Alabama 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.~~
History: ~~Effective Date: January 18, 1972.~~
Amended: ~~April 6, 2001.~~

335-3-8-.15 ~~Standards for New Combined-Cycle Electric Generating Units.~~ Reserved

~~(1) Applicability. The requirements of this rule apply to all natural gas-fired and fuel oil-fired combined-cycle electric generating units which commence operation on or after April 1, 2003. The requirements of this rule do not pre-empt the applicability of any other State or Federal regulations.~~

~~(2) Definitions. For the purposes of this rule, the following definitions apply:~~

~~(a) "Combined-Cycle Electric Generating Unit" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.~~

~~(b) "Commence Operation" means to have begun to produce steam, gas, or other heated medium used to generate electricity for use or sale, including test generation.~~

~~(c) "Fuel Oil" means any petroleum-based fuel (including diesel fuel) as defined by the American Society for Testing and Materials in ASTM D396-90a, "Standard Specification for Fuel Oils".~~

~~(d) "Natural Gas" means a naturally fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.~~

~~(3) Emission Limitations.~~

~~(a) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by natural gas in excess of 4.0 ppmvd at 15% O_2.~~

~~(b) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by fuel oil in excess of 15.0 ppmvd at 15% O_2.~~

~~(4) Compliance Method. Compliance with the nitrogen oxides emissions limitations in paragraph (3) of this rule shall be determined by EPA Reference Method 20 as found in 40 CFR 60, Appendix A [and incorporated by reference in rule 335-3-10-.03(1)].~~

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 23, 2003.

335-3-8-.16 REPEAL ~~CAIR NO_x Annual Budget Trading Program.~~ Reserved.

~~(1) Purpose. Rules 335-3-8-.16 through 335-3-8-.24 establish general provisions and the designated representative, permitting, allowance, monitoring, and opt-in provisions for the Clean Air Interstate Rule (CAIR) NO_x Annual Trading Program for Alabama's State Implementation Plan, under section 110 of the Clean Air Act and 40 CFR § 51.123, as a means of mitigating interstate transport of fine particulates and nitrogen oxides. The State authorizes the Administrator to assist the State in implementing the CAIR NO_x Annual Trading Program by carrying out the functions set forth for the Administrator in such requirements.~~

~~(2) Definitions. For the purpose of rules 335-3-8-.16 through 335-3-8-.24, the following definitions apply:~~

~~(a) "Account number" means the identification number given by the Administrator to each CAIR NO_x Allowance Tracking System account.~~

~~(b) "Acid Rain emissions limitation" means, as defined in 40 CFR § 72.2 and incorporated by reference in ADEM Admin. Code r. 335-3-18-.01, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under Title IV of the CAA.~~

~~(c) "Acid Rain Program" means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under Title IV of the CAA and 40 CFR 72 through 78.~~

~~(d "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.~~

~~(e) "Allocate or allocation" means, with regard to CAIR NO_x allowances, the determination by the Department of the amount of such CAIR NO_x allowances to be initially credited to a CAIR NO_x unit under rule 335-3-8-.20 or 335-3-8-.24(9), or the determination by the Administrator or other permitting authority of the amount of CAIR NO_x allowances to be initially credited to a CAIR NO_x unit, new unit set aside, or other entity.~~

~~(f) "Allowance transfer deadline" means, for a control period, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately following the control period and is the deadline by which a CAIR NO_x allowance transfer must be submitted for recordation in a CAIR NO_x source's compliance account in order to be used to meet the source's CAIR NO_x emissions limitation for such control period in accordance with rule 335-3-8-.21(5).~~

~~(g) "Alternate CAIR designated representative" means, for a CAIR NO_x source and each CAIR NO_x unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with rules 335-3-8-.17 and 335-3-8-.24, to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NO_x~~

Annual Trading Program. If the CAIR NO_X source is also a CAIR SO_2 source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_X source is also a CAIR NO_X Ozone Season source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_X Ozone Season Trading Program. If the CAIR NO_X source is also subject to the Acid Rain Program, then this natural person shall be the same person as the alternate designated representative under the Acid Rain Program.

(h) "Automated data acquisition and handling system or DAHS" means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under rule 335-3-8-.23, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by rule 335-3-8-.23.

(i) "Biomass" means:

1. Any organic material grown for the purpose of being converted to energy;

2. Any organic byproduct of agriculture that can be converted into energy; or

3. Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantible material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

(j) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(k) "Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

(l) "CAIR authorized account representative" means, with regard to a general account, a responsible natural person who is authorized, in accordance

with rules 335-3-8-.17, 335-3-8-.21, and 335-3-8-.24, to transfer and otherwise dispose of CAIR NO_x allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

(m) "CAIR designated representative" means, for a CAIR NO_x source and each CAIR NO_x unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with rules 335-3-8-.17 and 335-3-8-.24, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Annual Trading Program. If the CAIR NO_x source is also a CAIR SO_2 source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_x source is also a CAIR NO_x Ozone Season source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program.

(n) "CAIR NO_x allowance" means a limited authorization issued by the Department under rules 335-3-8-.20 or 335-3-8-.24(9) or issued by the Administrator or other permitting authority under provisions of a State Implementation Plan that are approved under 40 CFR § 51.123(o)(1) or (2) or (p), or under 40 CFR 97, Subpart EE or § 97.188, to emit one ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NO_x Program. An authorization to emit nitrogen oxides that is not issued under provisions of rules 335-3-8-.16 through 335-3-8-.24 or other provisions of a State Implementation Plan that are approved under 40 CFR § 51.123(o)(1) or (2) or (p) or 40 CFR 97, Subpart EE or § 97.188, shall not be a CAIR NO_x allowance.

(o) "CAIR NO_x allowance deduction or deduct CAIR NO_x allowances" means the permanent withdrawal of CAIR NO_x allowances by the Administrator from a compliance account, e.g., in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NO_x units at a CAIR NO_x source for a control period, determined in accordance with rule 335-3-8-.23, or to account for excess emissions.

(p) "CAIR NO_x Allowance Tracking System" means the system by which the Administrator records allocations, deductions, and transfers of CAIR NO_x allowances under the CAIR NO_x Annual Trading Program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

(q) "CAIR NO_x Allowance Tracking System account" means an account in the CAIR NO_x Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of CAIR NO_x allowances.

(r) "CAIR NO_x allowances held or hold CAIR NO_x allowances" means the CAIR NO_x allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with rules 335-3-8-.21, 335-3-8-.22 and 335-3-8-.24, in a CAIR NO_x Allowance Tracking System account.

(s) "CAIR NO_x Annual Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AA through II of 40 CFR 96 and 40 CFR § 51.123(o)(1) or (2) or established by the Administrator in accordance with 40 CFR 97, Subparts AA through II and 40 CFR § 51.123(p) and § 52.35, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

(t) "CAIR NO_x emissions limitation" means, for a CAIR NO_x source, the tonnage equivalent, in NO_x emissions in a control period, of the CAIR NO_x allowances available for deduction for the source under rule 335-3-8-.21(5)(a) and (b) for the control period.

(u) "CAIR NO_x Ozone Season source" means a source that is subject to the CAIR NO_x Ozone Season Trading Program.

(v) "CAIR NO_x Ozone Season Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAAA through IIII of 40 CFR 96 and 40 CFR § 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd) or established by the Administrator in accordance with Subparts AAAA through IIII of 40 CFR 97 and 40 CFR §§ 51.123(ee) and 52.35, as a means of mitigating interstate transport of ozone and nitrogen oxides.

(w) "CAIR NO_x source" means a source that includes one or more CAIR NO_x units.

(x) "CAIR NO_x unit" means a unit that is subject to the CAIR NO_x Annual Trading Program under paragraph (4) of this rule and, except for purposes of paragraph (5) of this rule and rule 335-3-8-.20, a CAIR NO_x opt-in unit under rule 335-3-8-.24.

(y) "CAIR permit" means the legally binding and federally enforceable written document issued by the Department under rule 335-3-8-.18, including any permit revisions, specifying the CAIR NO_x Annual Trading Program requirements applicable to a CAIR NO_x source, to each CAIR NO_x unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

(z) "CAIR SO_2 source" means a source that is subject to the CAIR SO_2 Trading Program.

(aa) "CAIR SO_2 Trading Program" means a multi-state sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAA through III of 40 CFR 96

and 40 CFR § 51.124(o)(1) or (2) or established by the Administrator in accordance with Subparts AAA through III of 40 CFR 97 and 40 CFR §§ 51.124(r) and 52.36, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

(bb) "Clean Air Act or CAA" means the Clean Air Act, 42 U.S.C. 7401, et seq.

(cc) "Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

(dd) "Coal-derived fuel" means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

(ee) "Coal-fired" means:

1. Except for purposes of rule 335-3-8-.20, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year; or

2. For purposes of rule 335-3-8-.20, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

(ff) "Cogeneration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

2. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity –

(i) For a topping-cycle cogeneration unit,

(I) Useful thermal energy not less than 5 percent of total energy output; and

(II) Useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input;

3. Provided that the total energy input under subparagraphs 2.(i)(II) and 2.(ii) of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

(gg) "Combustion turbine" means:

1. An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

2. If the enclosed device under subparagraph 1. of this definition is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

(hh) "Commence commercial operation" means, with regard to a unit:

1. To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in paragraph (5) of this rule and rule 335-3-8-.24(5)(h).

(i) For a unit that is a CAIR NO_X unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CAIR NO_X unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subparagraph 1. or 2. of this definition as appropriate.

2. Notwithstanding subparagraph 1. of this definition and except as provided in paragraph (5) of this rule, for a unit that is not a CAIR NO_X unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_X unit under paragraph (4) of this rule.

(i) For a unit with a date for commencement of commercial operation as defined in subparagraph 2. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in subparagraph 2. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subparagraph 1. or 2. of this definition as appropriate.

(ii) "Commence operation" means:

1. To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start up of a unit's combustion chamber, except as provided in rule 335-3-8-.24(5)(h).

2. For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in subparagraph 1. of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

3. For a unit that is replaced by a unit at the same source (e.g., repowered) after the date the unit commences operation as defined in subparagraph 1. of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in subparagraph 1., 2., or 3. of this definition as appropriate, except as provided in rule 335-3-8-.24(5)(h).

(jj) "Common stack" means a single flue through which emissions from 2 or more units are exhausted.

(kk) "Compliance account" means a CAIR NO_X Allowance Tracking System account, established by the Administrator for a CAIR NO_X source under rule 335-3-8-.21 or 335-3-8-.24, in which any CAIR NO_X allowance allocations for the CAIR NO_X units at the source are initially recorded and in which are held any CAIR NO_X allowances available for use for a control period in order to meet the source's CAIR NO_X emissions limitation in accordance with rule 335-3-8-.21(5).

(ll) "Continuous emission monitoring system or CEMS" means the equipment required under rule 335-3-8-.23 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes [using an automated data acquisition and handling system (DAHS)], a permanent record of nitrogen oxides emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR 75. The following systems are the principal types of continuous emission monitoring systems required under rule 335-3-8-.23:

1. A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

2. A nitrogen oxides concentration monitoring system, consisting of a NO_X pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X emissions, in parts per million (ppm);

3. A nitrogen oxides emission rate (or NO_X diluent) monitoring system, consisting of a NO_X pollutant concentration monitor, a diluent gas (CO_2 or O_2) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2, and NO_X emission rate, in pounds per million British thermal units (lb/mmBtu);

4. A moisture monitoring system, as defined in 40 CFR § 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O;

5. A carbon dioxide monitoring system, consisting of a CO_2 pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

6. An oxygen monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2, in percent O_2.

(mm) "Control period" means the period beginning January 1 of a calendar year, except as provided in subparagraph (6)(c)2. of this rule, and ending on December 31 of the same year, inclusive.

(nn) "Department" means the Alabama Department of Environmental Management authorized by the Administrator to issue or revise permits to meet the requirements of the CAIR NO_X Annual Trading Program in accordance with rule 335-3-8-.18.

(oo) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the CAIR designated representative and as determined by the Administrator in accordance with rule 335-3-8-.23.

(pp) "Excess emissions" means any ton of nitrogen oxides emitted by the CAIR NO_X units at a CAIR NO_X source during a control period that exceeds the CAIR NO_X emissions limitation for the source.

(qq) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

(rr) "Fossil-fuel-fired" means, with regard to a unit, combusting any amount of fossil fuel in any calendar year.

(ss) "Fuel oil" means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid, or gaseous state.

(tt) "General account" means a CAIR NO_x Allowance Tracking System account, established under rule 335-3-8-.21, that is not a compliance account.

(uu) "Generator" means a device that produces electricity.

(vv) "Gross electrical output" means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

(ww) "Heat input" means, with regard to a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the CAIR designated representative and determined by the Administrator in accordance with rule 335-3-8-.23 and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(xx) "Heat input rate" means the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

(yy) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

1. For the life of the unit;

2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

3. For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(zz) "Maximum design heat input" means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state

basis as of the initial installation of the unit as specified by the manufacturer of the unit.

(aaa) "Monitoring system" means any monitoring system that meets the requirements of rule 335-3-8-.23, including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under 40 CFR 75.

(bbb) "Most stringent State or Federal NO_X emissions limitation" means, with regard to a unit, the lowest NO_X emissions limitation (in terms of lb/mmBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

(ccc) "Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

(ddd) "Oil fired" means, for purposes of rule 335-3-8-.20, combusting fuel oil for more than 15.0 percent of the annual heat input in a specified year and not qualifying as coal fired.

(eee) "Operator" means any person who operates, controls, or supervises a CAIR NO_X unit or a CAIR NO_X source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

(fff) "Owner" means any of the following persons:

1. With regard to a CAIR NO_X source or a CAIR NO_X unit at a source, respectively:

(i) Any holder of any portion of the legal or equitable title in a CAIR NO_X unit at the source or the CAIR NO_X unit;

(ii) Any holder of a leasehold interest in a CAIR NO_X unit at the source or the CAIR NO_X unit; or

(iii) Any purchaser of power from a CAIR NO_X unit at the source or the CAIR NO_X unit under a life of the unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CAIR NO_X unit; or

2. With regard to any general account, any person who has an ownership interest with respect to the CAIR NO_x allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NO_x allowances.

(ggg) "Potential electrical output capacity" means 33 percent of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

(hhh) "Receive or receipt of" means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.

(iii) "Recordation, record, or recorded" means, with regard to CAIR NO_x allowances, the movement of CAIR NO_x allowances by the Administrator into or between CAIR NO_x Allowance Tracking System accounts, for purposes of allocation, transfer, or deduction.

(jjj) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR § 75.22 [incorporated by reference in ADEM Admin. Code r. 335-3-10-.03(1)].

(kkk) "Replacement, replace, or replaced" means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

(lll) "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

1. Atmospheric or pressurized fluidized bed combustion;

2. Integrated gasification combined cycle;

3. Magnetohydrodynamics;

4. Direct and indirect coal-fired turbines;

5. Integrated gasification fuel cells; or

6. As determined by the Administrator in consultation with the Secretary of Energy, a derivative of one or more of the technologies under subparagraphs 1. through 5. of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with

~~significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.~~

~~(mmm) "Serial number" means, for a CAIR NO_X allowance, the unique identification number assigned to each CAIR NO_X allowance by the Administrator.~~

~~(nnn) "Sequential use of energy" means:~~

~~1. For a topping cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or~~

~~2. For a bottoming cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.~~

~~(ooo) "Solid waste incineration unit" means a stationary, fossil fuel fired boiler or stationary, fossil fuel fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.~~

~~(ppp) "Source" means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of section 502(c) of the Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility."~~

~~(qqq) "State" means~~

~~1. The State of Alabama, the Environmental Management Commission, and the Commission's representatives; or~~

~~2. One of the States or the District of Columbia that adopts the CAIR NO_X Annual Trading Program pursuant to 40 CFR § 51.123(o)(1) or (2).~~

~~(rrr) "State Annual Trading Program Budget" means the total number of NOx tons apportioned to all CAIR NOx units in Alabama, in accordance with the CAIR NOx Annual Trading Program, for use in a given control period.~~

~~(sss) "Submit or serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:~~

~~1. In person;~~

~~2. By United States Postal Service; or~~

~~3. By other means of dispatch or transmission and delivery. Compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.~~

(ttt) "Title V operating permit" means a "Major Source Operating Permit" as defined and issued under chapter 335-3-16.

(uuu) "Title V operating permit regulations" means the "Major Source Operating Permits" regulations in chapter 335-3-16 that the Administrator has approved as meeting the requirements of Title V of the Clean Air Act and 40 CFR 70 or 71.

(vvv) "Ton" means 2,000 pounds. For the purpose of determining compliance with the CAIR NO_x emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions (or the mass equivalent of the recorded hourly emission rates) in accordance with rule 335-3-8-.23, but with any remaining fraction of a ton equal to or greater than 0.50 tons deemed to equal one ton and any remaining fraction of a ton less than 0.50 tons deemed to equal zero tons.

(www) "Topping cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

(xxx) "Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

LHV = HHV - 10.55(W + 9H)

Where:

LHV = lower heating value of fuel in Btu/lb,

HHV = higher heating value of fuel in Btu/ lb,

W = Weight % of moisture in fuel, and

H = Weight % of hydrogen in fuel.

(yyy) "Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

(zzz) "Unit" means a stationary, fossil-fuel-fired boiler or combustion turbine or other stationary, fossil-fuel-fired combustion device.

(aaaa) "Unit operating day" means a calendar day in which a unit combusts any fuel.

(bbbb) "Unit operating hour or hour of unit operation" means an hour in which a unit combusts any fuel.

(cccc) "Useful power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

(dddd) "Useful thermal energy" means, with regard to a cogeneration unit, thermal energy that is:

1. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

2. Used in a heating application (e.g., space heating or domestic hot water heating); or

3. Used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(eeee) "Utility power distribution system" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

(3) Measurements, Abbreviations, and Acronyms. Measurements, abbreviations, and acronyms used in this rule and in rules 335-3-8-.17 through 335-3-8-.24 are defined as follows:

(a) Btu—British thermal unit.

(b) CO_2—carbon dioxide.

(c) H_2O—water.

(d) Hg—mercury.

(e) hr—hour.

(f) kW—kilowatt electrical.

(g) kWh—kilowatt hour.

(h) lb—pound.

(i) mmBtu—million Btu.

(j) MWe—megawatt electrical.

(k) MWh—megawatt hour.

(l) NO_x—nitrogen oxides.

~~(m) O_2—oxygen.~~

~~(n) ppm—parts per million.~~

~~(o) scfh—standard cubic feet per hour.~~

~~(p) SO_2—sulfur dioxide.~~

~~(q) yr—year.~~

~~(4) Applicability.~~

~~(a) Except as provided in subparagraph (b) of this paragraph:~~

~~1. The following units in the State of Alabama shall be CAIR NO_X units, and any source that includes one or more such units shall be a CAIR NO_X source, subject to the requirements of rules 335-3-8-.17 through 335-3-8-.23: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.~~

~~2. If a stationary boiler or stationary combustion turbine that, under subparagraph (a)1. of this paragraph, is not a CAIR NO_X unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CAIR NO_X unit as provided in subparagraph (a)1. of this paragraph on the first date on which it both combusts fossil fuel and serves such generator.~~

~~(b) The units in the State that meet the requirements set forth in subparagraph (b)1. or (b)2. of this paragraph shall not be CAIR NO_X units:~~

~~1. Any unit that is a CAIR NO_X unit under subparagraph (a)1. or 2. of this paragraph:~~

~~(i) Qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and~~

~~(ii) Not serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.~~

~~(iii) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subparagraphs (b)1.(i) and (ii) of this paragraph for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_X unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a~~

~~cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subparagraph (b)1.(ii) of this paragraph.~~

~~2. Any unit that is a CAIR NO_X unit under subparagraph (a)1. or 2. of this paragraph commencing operation before January 1, 1985:~~

~~(i) Qualifying as a solid waste incineration unit; and~~

~~(ii) With an average annual fuel consumption of non-fossil fuel for 1985 – 1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).~~

~~(iii) Any unit that is a CAIR NO_X unit under subparagraph (a)1. or 2. of this paragraph commencing operation on or after January 1, 1985:~~

~~(I) Qualifying as a solid waste incineration unit; and~~

~~(II) With an average annual fuel consumption of non-fossil fuel for the first 3 calendar years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).~~

~~(iv) If a unit qualifies as a solid waste incineration unit and meets the requirements of subparagraph (b)2.(i), (ii), or (iii) of this paragraph for at least 3 consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_X unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more.~~

~~(5) Retired unit exemption.~~

~~(a) Any CAIR NO_X unit that is permanently retired and is not a CAIR NO_X opt-in unit under rule 335-3-8-.24 shall be exempt from the CAIR NO_X Annual Trading Program, except for the provisions of this paragraph, paragraphs (2), (3), (4), (7) and (8), subparagraphs (6)(c)4. through 7. of this rule, and rules 335-3-8-.17 and 335-3-8-.20 through 335-3-8-.22.~~

~~1. The exemption under subparagraph (a) of this paragraph shall become effective the day on which the CAIR NO_X unit is permanently retired. Within 30 days of the unit's permanent retirement, the CAIR designated representative shall submit a statement to the Department otherwise responsible for administering any CAIR permit for the unit and shall submit a copy of the statement to the Administrator. The statement shall state, in a format prescribed by the Department, that the unit was permanently retired on a specific date and will comply with the requirements of subparagraph (b) of this paragraph.~~

2. After receipt of the statement under subparagraph (a)1. of this paragraph, the Department will amend any permit under rule 335-3-8-.18 covering the source at which the unit is located to add the provisions and requirements of the exemption under subparagraphs (a) and (b) of this paragraph.

(b) Special provisions.

1. A unit exempt under subparagraph (a) of this paragraph shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.

2. The Department will assign CAIR NO_x allowances to the Retired Unit Allowance Pool under rule 335-3-8-.20(3)(c)2. for a unit exempt under subparagraph (a) of this paragraph.

3. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under subparagraph (a) of this paragraph shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Department or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

4. The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under subparagraph (a) of this paragraph shall comply with the requirements of the CAIR NO_x Annual Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

5. A unit exempt under subparagraph (a) of this paragraph and located at a source that is required, or but for this exemption would be required, to have a Title V operating permit or other federally enforceable permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR permit application under rule 335-3-8-.18(3) for the unit not less than 18 months (or such lesser time provided under the Department's major source operating permit regulations for final action on a permit application) before the later of January 1, 2009 or the date on which the unit resumes operation.

6. Loss of exemption.

(i) On the earlier of the following dates, a unit exempt under subparagraph (a) of this paragraph shall lose its exemption:

(I) The date on which the CAIR designated representative submits a CAIR permit application for the unit under subparagraph (b)5. of this paragraph;

(II) The date on which the CAIR designated representative is required under subparagraph (b)5. of this paragraph to submit a CAIR permit application for the unit; or

(III) The date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR permit application for the unit.

7. For the purpose of applying monitoring, reporting, and recordkeeping requirements under rule 335-3-8-.23, a unit that loses its exemption under subparagraph (a) of this paragraph shall be treated as a unit that commences commercial operation on the first date on which the unit resumes operation.

(6) Standard Requirements.

(a) Permit Requirements.

1. The CAIR designated representative of each CAIR NO_x source required to have a Title V operating permit or other federally enforceable permit and each CAIR NO_x unit required to have a Title V operating permit or other federally enforceable permit at the source shall:

(i) Submit to the Department a complete CAIR permit application under rule 335-3-8-.18(3) in accordance with the deadlines specified in rule 335-3-8-.18(2); and

(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

2. The owners and operators of each CAIR NO_x source required to have a Title V operating permit or other federally enforceable permit and each CAIR NO_x unit required to have a Title V operating permit or other federally enforceable permit at the source shall have a CAIR permit issued by the Department under rule 335-3-8-.18 for the source and operate the source and the unit in compliance with such CAIR permit.

3. Except as provided in rule 335-3-8-.24, the owners and operators of a CAIR NO_x source that is not otherwise required to have a Title V operating permit or other federally enforceable permit and each CAIR NO_x unit that is not otherwise required to have a Title V operating permit or other federally enforceable permit are not required to submit a CAIR permit application, and to have a CAIR permit, under rule 335-3-8-.18 for such CAIR NO_x source and such CAIR NO_x unit.

(b) Monitoring, reporting, and recordkeeping requirements.

1. The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of rule 335-3-8-.23.

2. The emissions measurements recorded and reported in accordance with rule 335-3-8-.23 shall be used to determine compliance by each CAIR NO_x source with the CAIR NO_x emissions limitation under subparagraph (c) below.

(c) Nitrogen oxides emission requirements.

1. As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under rule 335-3-8-.21(5)(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with rule 335-3-8-.23.

2. A CAIR NO_x unit shall be subject to the requirements under subparagraph (c)1. of this paragraph for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under rule 335-3-8-.23(1)(b)1., 2., or 5. and for each control period thereafter.

3. A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under subparagraph (c)1. of this paragraph, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.

4. CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with rules 335-3-8-.21, 335-3-8-.22, and 335-3-8-.24.

5. A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under paragraph (5) of this rule and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

6. A CAIR NO_x allowance does not constitute a property right.

7. Upon recordation by the Administrator under rules 335-3-8-.20, 335-3-8-.21, 335-3-8-.22 or 335-3-8-.24, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess emissions requirements. If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, then:

1. The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under rule 335-3-8-.21(5)(d)1. and pay any fine, penalty, or assessment or

comply with any other remedy imposed, for the same violations, under the rule 335-3-8-.21(5)(d)2.; and

2. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this rule, the Clean Air Act, and applicable State law.

(e) Recordkeeping and reporting requirements.

1. Unless otherwise provided, the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under rule 335-3-8-.17(4) for the CAIR designated representative for the source and each CAIR NO_X unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under rule 335-3-8-.17(4) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with rule 335-3-8-.23, provided that to the extent that rule 335-3-8-.23 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program.

2. The CAIR designated representative of a CAIR NO_X source and each CAIR NO_X unit at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, including those under rule 335-3-8-.23.

(f) Liability.

1. Each CAIR NO_X source and each CAIR NO_X unit shall meet the requirements of the CAIR NO_X Annual Trading Program.

2. Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X source or the CAIR designated representative of a CAIR NO_X source shall also apply to the owners and operators of such source and of the CAIR NO_X units at the source.

3. Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the CAIR NO_x Annual Trading Program, a CAIR permit application, a CAIR permit, or an exemption under rule 335-3-8-.16(5) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

(7) Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the CAIR NO_x Annual Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the CAIR NO_x Annual Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the CAIR NO_x Annual Trading Program, falls on a weekend or a State or Federal holiday, including those designated as a holiday by the President or the Congress of the United States, or the Governor of Alabama, or as prescribed in Code of Alabama (1975), § 1-3-8, the time period shall be extended to the next business day.

(8) Appeal Procedures. The appeal procedures for decisions of the Administrator under the CAIR NO_x Annual Trading Program are set forth in 40 CFR 78.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.17 REPEAL ~~CAIR Designated Representative for CAIR NO_x Sources.~~ Reserved.

~~(1) Authorization and responsibilities of CAIR designated representative.~~

~~(a) Except as provided under paragraph (2) below, each CAIR NO_x source, including all CAIR NO_x units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NO_x Annual Trading Program concerning the source or any CAIR NO_x unit at the source.~~

~~(b) The CAIR designated representative of the CAIR NO_x source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NO_x units at the source and shall act in accordance with the certification statement in subparagraph (4)(a)4.(iv) of this rule.~~

~~(c) Upon receipt by the Administrator of a complete certificate of representation under paragraph (4) of this rule, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NO_x source represented and each CAIR NO_x unit at the source in all matters pertaining to the CAIR NO_x Annual Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the Department, the Administrator, or a court regarding the source or unit.~~

~~(d) No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NO_x Allowance Tracking System account will be established for a CAIR NO_x unit at a source, until the Administrator has received a complete certificate of representation under paragraph (4) of this rule for a CAIR designated representative of the source and the CAIR NO_x units at the source.~~

~~(e) Each submission under the CAIR NO_x Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NO_x source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

1. The Department and the Administrator will accept or act on a submission made on behalf of owner or operators of a CAIR NO_x source or a CAIR NO_x unit only if the submission has been made, signed, and certified in accordance with subparagraph (e) of this paragraph.

(2) Alternate CAIR designated representative.

(a) A certificate of representation under paragraph (4) of this rule may designate one and only one alternate CAIR designated representative, who may act on behalf of the CAIR designated representative. The agreement by which the alternate CAIR designated representative is selected shall include a procedure for authorizing the alternate CAIR designated representative to act in lieu of the CAIR designated representative.

(b) Upon receipt by the Administrator of a complete certificate of representation under paragraph (4) of this rule, any representation, action, inaction, or submission by the alternate CAIR designated representative shall be deemed to be a representation, action, inaction, or submission by the CAIR designated representative.

(c) Except in this paragraph and subparagraphs (1)(a) and (d) and paragraphs (3), (4) and (6) of this rule, and rules 335-3-8-.16(2), 335-3-8-.21(2), and 335-3-8-.24(3), whenever the term "CAIR designated representative" is used in rules 335-3-6-.16 through 335-3-8-.24, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

(3) Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.

(a) Changing CAIR designated representative. The CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new CAIR designated representative and the owners and operators of the CAIR NO_x source and the CAIR NO_x units at the source.

(b) Changing alternate CAIR designated representative. The alternate CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate CAIR designated representative and the owners and operators of the CAIR NO_x source and the CAIR NO_x units at the source.

(c) Changes in owners and operators.

1. In the event an owner or operator of a CAIR NO_x source or a CAIR NO_x unit is not included in the list of owners and operators in the certificate of representation under paragraph (4) of this rule, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the CAIR designated representative and any alternate CAIR designated representative of the source or unit, and the decisions and orders of the Department, the Administrator, or a court, as if the owner or operator were included in such list.

2. Within 30 days following any change in the owners and operators of a CAIR NO_x source or a CAIR NO_x unit, including the addition of a new owner or operator, the CAIR designated representative or any alternate CAIR designated representative shall submit a revision to the certificate of representation under paragraph (4) of this rule amending the list of owners and operators to include the change.

(4) Certificate of representation.

(a) A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall include the following elements in a format prescribed by the Administrator:

1. Identification of the CAIR NO_x source, and each CAIR NO_x unit at the source, for which the certificate of representation is submitted, including identification and nameplate capacity of each generator served by each such unit.

2. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR designated representative and any alternate CAIR designated representative.

3. A list of the owners and operators of the CAIR NO_x source and of each CAIR NO_x unit at the source.

4. The following certification statements by the CAIR designated representative and any alternate CAIR designated representative:

(i) "I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative, as applicable, by an agreement binding on the owners and operators of the source and each CAIR NO_x unit at the source."

(ii) "I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Annual Trading Program on behalf of the owners and operators of the source and of each CAIR NO_x unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions."

~~(iii) "I certify that the owners and operators of the source and of each CAIR NO_x unit at the source shall be bound by any order issued to me by the Administrator, the Department, or a court regarding the source or unit."~~

~~(iv) "Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_x unit, or where a utility or industrial customer purchases power from a CAIR NO_x unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'CAIR designated representative' or 'alternate CAIR designated representative', as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each CAIR NO_x unit at the source; and CAIR NO_x allowances and proceeds of transactions involving CAIR NO_x allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_x allowances by contract, CAIR NO_x allowances and proceeds of transactions involving CAIR NO_x allowances will be deemed to be held or distributed in accordance with the contract."~~

~~5. The signature of the CAIR designated representative and any alternate CAIR designated representative and the dates signed.~~

~~(b) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.~~

~~(5) Objections concerning CAIR designated representative.~~

~~(a) Once a complete certificate of representation under paragraph (4) of this rule has been submitted and received, the Department and the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under paragraph (4) of this rule is received by the Administrator.~~

~~(b) Except as provided in subparagraphs (3)(a) or (b) of this rule, no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission, of the CAIR designated representative shall affect any representation, action, inaction, or submission of the CAIR designated representative or the finality of any decision or order by the Department or the Administrator under the CAIR NO_x Annual Trading Program.~~

~~(c) Neither the Department nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any CAIR designated representative, including private legal disputes concerning the proceeds of CAIR NO_x allowance transfers.~~

(6) Delegation by CAIR designated representative and alternate CAIR designated representative.

(a) A CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this rule.

(b) An alternate CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this rule.

(c) In order to delegate authority to make an electronic submission to the Administrator in accordance with subparagraph (a) or (b) of this paragraph, the CAIR designated representative or alternate CAIR designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

1. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR designated representative or alternate CAIR designated representative;

2. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an "agent");

3. For each such natural person, a list of the type or types of electronic submissions under subparagraph (a) or (b) of this paragraph for which authority is delegated to him or her; and

4. The following certification statements by such CAIR designated representative or alternate CAIR designated representative:

(i) "I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR designated representative or alternate CAIR designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 96.115(d) shall be deemed to be an electronic submission by me."

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 96.115(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 96.115 is terminated."

(d) A notice of delegation submitted under subparagraph (c) of this paragraph shall be effective, with regard to the CAIR designated representative or alternate CAIR designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR

designated representative or alternate CAIR designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in subparagraph (c)4.(i) of this paragraph and made in accordance with a notice of delegation effective under subparagraph (d) of this paragraph shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.18 REPEAL ~~CAIR Permits.~~ Reserved.

~~(1) General CAIR NO_X Annual Trading Program permit requirements.~~

~~(a) For each CAIR NO_X source required to have a Title V operating permit or required, under rule 335-3-8-.24, to have a Title V operating permit or other federally enforceable permit, such permit shall include a CAIR permit administered by the Department. Any requirements of the CAIR permit shall be considered federally enforceable.~~

~~1. For CAIR NO_X sources required to have a Title V operating permit, the CAIR portion of the Title V operating permit shall be administered in accordance with the procedures under chapter 335-3-16, except as provided otherwise by this rule, rule 335-3-8-.16, or rule 335-3-8-.24. The applicable provisions of such requirements shall include, but are not limited to, those provisions addressing operating permit applications, operating permit application shield, operating permit duration, operating permit shield, operating permit issuance, operating permit revision and reopening, public participation, State review, and review by the Administrator.~~

~~(b) Each CAIR permit shall contain, with regard to the CAIR NO_X source and the CAIR NO_X units at the source covered by the CAIR permit, all applicable CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program, and CAIR SO_2 Trading Program requirements and shall be a complete and separable portion of the Title V operating permit or other federally enforceable permit under subparagraph (a) of this paragraph.~~

~~(2) Submission of CAIR permit applications.~~

~~(a) Duty to apply. The CAIR designated representative of any CAIR NO_X source required to have a Title V operating permit or other federally enforceable permit shall submit to the Department a complete CAIR permit application under paragraph (3) of this rule for the source covering each CAIR NO_X unit at the source at least 18 months (or such lesser time provided under the Department's permit regulations in rule 335-3-16 for final action on a permit application) before the later of January 1, 2009 or the date on which the CAIR NO_X unit commences commercial operation, except as provided in rule 335-3-8-.24(4)(a).~~

~~(b) Duty to Reapply. For a CAIR NO_X source required to have a Title V operating permit, the CAIR designated representative shall submit a complete CAIR permit application under paragraph (3) of this rule for the source covering each CAIR NO_X unit at the source to renew the CAIR permit in accordance with the Department's Title V operating permits regulations in chapter 335-3-16 addressing operating permit renewal, except as provided in rule 335-3-8-.24(4)(b).~~

~~(3) Information requirements for CAIR permit applications. A complete CAIR permit application shall include the following elements concerning the~~

CAIR NO_X source for which the application is submitted, in a format prescribed by the Department:

(a) Identification of the CAIR NO_X source;

(b) Identification of each CAIR NO_X unit at the CAIR NO_X source; and

(c) The standard requirements under rule 335-3-8-.16(6).

(4) CAIR permit contents and term.

(a) Each CAIR permit will contain, in a format prescribed by the Department, all elements required for a complete CAIR permit application under paragraph (3) of this rule.

(b) Each CAIR permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.16(2) and, upon recordation by the Administrator under rules 335-3-8-.20, 335-3-8-.21, 335-3-8-.22, or 335-3-8-.24, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from the compliance account of the CAIR NO_X source covered by the permit.

(c) The term of the CAIR permit will be set by the Department, as necessary to facilitate coordination of the renewal of the CAIR permit with issuance, revision, or renewal of the CAIR NO_X source's Title V operating permit or other federally enforceable permit as applicable.

(5) CAIR permit revisions. Except as provided in subparagraph (4)(b) of this rule, the Department will revise the CAIR permit, as necessary, in accordance with the Department's Title V operating permits regulations in chapter 335-3-16 addressing permit revisions, as applicable.

(a) For a CAIR NO_X source with a non-Title V permit, except as provided in subparagraph (4)(b) of this rule, the Department will revise the CAIR permit, as necessary, in accordance with the Department's permit regulations in chapter 335-3-14 or 335-3-15, as applicable.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-16, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.20 REPEAL ~~CAIR NO_x Allowance Allocations.~~Reserved.

~~(1) State Annual Trading Program Budget. The State trading budget for annual allocations of CAIR NO_x Annual allowances for the control periods in 2009 through 2014 is 69,020 tons and in 2015 and thereafter is 57,517 tons.~~

~~(2) Timing Requirements for NO_x Allowance Allocations.~~

~~(a) By October 31, 2006, the Department will submit to the Administrator, in a format prescribed by the administrator, the NO_x allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in 2009, 2010, and 2011.~~

~~(b) By October 31, 2008, the Department will submit to the Administrator, in a format prescribed by the administrator, the NO_x allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in 2012, 2013, and 2014.~~

~~(c) By October 31, 2011 and October 31 of every third year thereafter (i.e. 2014, 2017, etc.), the Department will submit to the Administrator, in a format prescribed by the administrator, the NO_x allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in the three years that are four, five, and six years, respectively, after the year of the applicable deadline for submission under this subparagraph.~~

~~(3) NO_x Allowance Allocations.~~

~~(a) Definitions. For the purpose of this rule, the following definitions apply:~~

~~1. Baseline CAIR NO_x Unit. A CAIR NO_x unit that either:~~

~~(i) Commenced operation on or before January 1, 2004; or~~

~~(ii) Submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before August 1, 2005.~~

~~2. Replacement CAIR NO_x Unit.~~

~~(i) A CAIR NO_x unit, which replaces at the same facility, a Baseline CAIR NO_x unit with the same or greater maximum design heat input capacity; or~~

~~(ii) The portion of a CAIR NO_x unit, which replaces at the same facility, a Baseline CAIR NO_x unit with the same or less maximum design heat input capacity.~~

~~3. New CAIR NO_x Unit.~~

~~(i) A CAIR NO_x unit that does not meet the definition of either Baseline CAIR NO_x Unit as defined in subparagraph (3)(a)1. of this paragraph or~~

~~Replacement CAIR NOx Unit as defined in subparagraph (3)(a)2.(ii) of this paragraph; or~~

~~(ii) The portion of a CAIR NOx unit that does not meet the definition of either Baseline CAIR NOx Unit or Replacement CAIR NOx Unit as defined in subparagraph (3)(a)1. and (3)(a)2. of this paragraph.~~

~~(b) Determination of Heat Input.~~

~~1. The heat input (in mmBtu) used for calculating CAIR NOx allowance allocations under subparagraph (2)(a) of this rule will be:~~

~~(i) For a Baseline CAIR NOx unit that commenced operation on or before January 1, 2002 the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2000, 2001, 2002, 2003 and 2004; or~~

~~(ii) For a Baseline CAIR NOx unit that did not commence operation on or before January 1, 2002 but did commence operation on or before January 1, 2003, the average heat input for the control periods, in which the unit operated, in 2003 and 2004; or~~

~~(iii) For a Baseline CAIR NOx unit that did not commence operation on or before January 1, 2003 but did commence operation on or before January 1, 2004, the heat input for the control period in 2004; or~~

~~(iv) For a Baseline CAIR NOx unit that did not commence operation on or before January 1, 2004 but had submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before August 1, 2005, the expected actual annual heat input based on actual utilization data of similar sources.~~

~~(v) For a Replacement CAIR NOx unit that did not commence operation on or before January 1, 2004, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the baseline unit operated, in 2000, 2001, 2002, 2003 and 2004 for the baseline CAIR NOx unit that it replaced.~~

~~(vi) For a New CAIR NOx unit that did not commence operation on or before January 1, 2004, the expected actual annual heat input based on actual utilization data of similar sources.~~

~~2. The heat input (in mmBtu) used for calculating CAIR NOx allowance allocations under subparagraph (2)(b) of this rule that are to be submitted to the Administrator by October 31, 2008 will be:~~

~~(i) For a Baseline or Replacement CAIR NOx unit that commenced operation on or before January 1, 2006 the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2003, 2004, 2005, 2006, and 2007; or~~

~~(ii) For a Baseline or Replacement CAIR NOx unit that did not commence operation on or before January 1, 2005 but did commence operation on or before January 1, 2006, the average heat input for the control periods, in which the unit operated, in 2006 and 2007; or~~

~~(iii) For a Baseline or Replacement CAIR NOx unit that did not commence operation on or before January 1, 2006 but did commence operation on or before January 1, 2007, the heat input for the control period in 2007; or~~

~~(iv) For a Replacement CAIR NOx unit that did not commence operation on or before January 1, 2007, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the baseline unit operated, in 2003, 2004, 2005, 2006 and 2007 for the baseline CAIR NOx unit that it replaced.~~

~~(v) For a New CAIR NOx unit that commenced operation on or before January 1, 2007, the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2003, 2004, 2005, 2006 and 2007; or~~

~~(vi) For a New CAIR NOx unit that did not commence operation on or before January 1, 2007, the expected actual annual heat input based on actual utilization data of similar sources.~~

~~3. The heat input (in mmBtu) used for calculating CAIR NOx allowance allocations under subparagraph (2)(c) of this rule that are to be submitted to the Administrator by October 31, 2011 and all subsequent allocation years will be:~~

~~(i) For a Baseline CAIR NOx unit, the average of the three highest amounts of the unit's heat input, in which the unit operated, for the five most recent control periods (e.g. allocations calculated for submission to the Administrator on October 31, 2011 will be based on annual heat inputs from 2006, 2007, 2008, 2009 and 2010); or~~

~~(ii) For a Replacement CAIR NOx unit, the average of the three (or less, if applicable) highest amounts of the unit's heat input, in which the unit operated, for the five most recent control periods (e.g. allocations calculated for submission to the Administrator on October 31, 2011 will be based on annual heat inputs from 2006, 2007, 2008, 2009 and 2010); or~~

~~(iii) For a Replacement CAIR NOx unit that did not commence operation on or before January 1 of the most recent control period, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the unit operated, in 2006, 2007, 2008, 2009 and 2010 for the baseline CAIR NOx unit that it replaced.~~

~~(iv) For a New CAIR NOx unit that commenced operation prior to January 1 of the most recent control period, the average of the three (or less, if applicable) highest amounts of the unit's heat input, in which the unit operated, for the five most recent control periods; or~~

(v) For a New CAIR NOx unit that did not commence operation prior to January 1 of the most recent control period, the expected actual annual heat input based on actual utilization data of similar sources.

4. The unit's total heat input for the control period in each year specified under subparagraph (b) of this paragraph will be determined in accordance with 40 CFR 75 if the CAIR NOx unit was otherwise subject to the requirements of 40 CFR 75 for the year, or will be based on the best available data reported to the Administrator and the Department for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

(c) Establishment of Baseline and Retired Unit Allowance Pools. At the time CAIR NOx allowances are initially allocated to baseline CAIR NOx units under subparagraph (e)1. of this paragraph, each unit's allocation will become that unit's "Baseline Allowance". This value will be used to calculate the following:

1. Baseline Allowance Pool. The Baseline Allowance Pool shall be calculated each time CAIR NOx allowances are allocated under paragraph (2) of this rule and shall equal the State Annual Trading Program Budget minus the total of the Baseline Allowances for all baseline CAIR NOx units that have retired in accordance with rule 335-3-8-.16(5).

2. Retired Unit Allowance Pool. The Retired Unit Allowance Pool shall be calculated each time CAIR NOx allowances are allocated under paragraph (2) of this rule and shall equal the sum of the Baseline Allowances for all CAIR NOx units that have retired in accordance with rule 335-3-8-.16(5).

(d) Adjustment Ratios. To ensure that the total number of CAIR NOx allowances allocated under paragraph (3) of this rule equals the number of tons of CAIR NOx emissions in the State trading program budget, the following ratios will be applied to the calculated CAIR NOx allowance allocations.

1. Baseline Adjustment Ratio. The Baseline Adjustment Ratio is the total number of CAIR NOx allowances in the Baseline Allowance Pool divided by the total number of CAIR NOx allowances calculated for Baseline CAIR NOx units for a control period prior to any adjustments.

(e) Calculation of CAIR NOx Allowances for Baseline CAIR NOx Units.

1. For each control period under subparagraph (2)(a) and (b) of this rule, the Department will allocate CAIR NOx allowances to all baseline CAIR NOx units in accordance with the following procedures:

(i) The Department will allocate CAIR NOx allowances to each CAIR NOx unit under rule 335-3-8-.16(4)(a) in an amount equaling 0.15 lb/mmBtu, or the unit's permitted NOx limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or (b)2. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NOx allowance as appropriate. These NOx allowances will be further adjusted in accordance with subparagraph (h) of this

~~paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~2. For each control period under subparagraph (2)(c) of this rule, the Department will allocate NO_x allowances to all baseline CAIR NO_x units in accordance with the following procedures:~~

~~(i) The Department will allocate NO_x allowances to each CAIR NO_x unit under rule 335-3-8-.16(4)(a) in an amount equaling 0.125 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances will be further adjusted in accordance with subparagraph (h) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~(f) Calculation of NO_x Allowances for Replacement CAIR NO_x units. For each control period under subparagraph (2)(a), (b), or (c) of this rule, after calculating NO_x allowances for all Baseline CAIR NO_x units that have not retired in accordance with rule 335-3-8-.16(5), the Department will allocate NO_x allowances from the Retired Unit Allowance Pool to all Replacement CAIR NO_x units in accordance with the following procedures:~~

~~1. For each Replacement CAIR NO_x unit under rule 335-3-8-.16(4)(a) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a) or (b) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or 2. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

2. For each Replacement CAIR NO_x unit under rule 335-3-8-.16(4)(a) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(c) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.125 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NOx rate will be used for allocation purposes.

(g) Calculation of NO_x Allowances for New CAIR NO_x Units. For each control period under subparagraph (2)(a), (b), or (c) of this rule, after calculating NO_x allowances for all baseline CAIR NO_x units that have not retired in accordance with rule 335-3-8-.16(5) and calculating NO_x allowances for all replacement CAIR NO_x Units, the Department will allocate NO_x allowances remaining in the Retired Unit Allowance Pool to all new CAIR NO_x units in accordance with the following procedures:

1. For each new CAIR NO_x unit under rule 335-3-8-.16(4)(a) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a) or (b) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or 2. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

2. For each new CAIR NO_x unit under rule 335-3-8-.16(4)(a) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(c) of this rule, the number of NO_x allowances allocated for each applicable control period will be equal to 0.125 lb/mmBtu, or the unit's permitted NO_x limit

(expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These NO_x allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

(h) Adjustment of Baseline NO_x Allowance Allocations. If NO_x allowances remain in the Retired Unit Allowance Pool after allocations are made to all replacement and new CAIR NO_x units in accordance with subparagraphs (f) and (g) of this paragraph, these NO_x allowances will be allocated on a pro rata basis to the baseline CAIR NO_x units for the applicable control periods.

(i) Adjustment of Replacement NO_x Allowance Allocations. If the total number of calculated NO_x allowances allocated to all replacement CAIR NO_x units under subparagraph (f) of this paragraph exceeds the number of NO_x allowances in the Retired Unit Allowance Pool, each unit's allocation will be further adjusted by multiplying by the ratio of the number of NO_x allowances in the Retired Unit Allowance Pool divided by the total number of NO_x allowance allocations to all replacement CAIR NO_x units under subparagraph (f) of this paragraph so that the number of NO_x allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted NO_x allowance allocations will be rounded to the nearest ton, as appropriate.

(j) Adjustment of New NO_x Allowance Allocations. If the total number of calculated NO_x allowances allocated to all new CAIR NO_x units under subparagraph (g) of this paragraph exceeds the number of NO_x allowances remaining in the Retired Unit Allowance Pool after allocation to replacement NO_x units, each unit's allocation will be further adjusted by multiplying by the ratio of the number of NO_x allowances remaining in the Retired Unit Allowance Pool after allocation to replacement CAIR NO_x units divided by the total number of NO_x allowance allocations to new CAIR NO_x units under subparagraph (g) of this paragraph so that the total number of NO_x allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted NO_x allowance allocations will be rounded to the nearest ton, as appropriate.

(k) NO_x allowances allocated to baseline CAIR NO_x units based on heat inputs determined in accordance with subparagraph (b)1.(iv) of this paragraph will be held in the Department's general account until the unit commences operation, but no later than October 31 of the year for which the CAIR NO_x allowances are being allocated. If the unit does not commence operations, the NO_x allowances will be transferred by the Department pro rata to Baseline CAIR NO_x units that were allocated NO_x allowances in accordance with subparagraphs (b)1.(i), (ii), or (iii) of this paragraph. By October 31 of the year

for which allowances are being allocated, the Department shall notify the Administrator of the appropriate NO_X allowance transfers.

(l) NO_X allowances allocated to Replacement CAIR NO_X units based on heat inputs determined in accordance with subparagraphs (b)1.(v), (b)2.(iv), or (b)3.(iii) of this paragraph will be held in the Department's general account until the unit commences operation, but no later than October 31 of the year for which the CAIR NO_X allowances are being allocated. If the unit does not commence operations, the NO_X allowances will be transferred by the Department pro rata to Baseline CAIR NO_X units that were allocated NO_X allowances in accordance with subparagraphs (b)1.(i) through (iii), (b)2.(i) through (iii), or (b)3.(i) of this paragraph. By October 31 of the year for which the allowances were allocated, the Department shall notify the Administrator of the appropriate NO_X allowance transfers.

(m) NO_X allowances allocated to new CAIR NO_X units based on heat inputs determined in accordance with subparagraphs (b)1.(vi), (b)2.(vi), or (b)3.(v) of this paragraph will be held in the Department's general account until the unit commences operation, but no later than October 31 of the year for which the CAIR NO_X allowances are being allocated. If the unit does not commence operations, the NO_X allowances will be transferred by the Department pro rata to Baseline CAIR NO_X units that were allocated NO_X allowances in accordance with subparagraphs (b)1.(i) through (iii), (b)2.(i) through (iii) or (b)3.(i) through (iii) of this paragraph. By October 31 of the year for which allowances are being allocated, the Department shall notify the Administrator of the appropriate NO_X allowance transfers.

(n) NO_X allowances will not be allocated to CAIR NO_X units that retire under 335-3-8-.16(5) prior to the date NO_X allowance allocations are submitted to the Administrator under subparagraphs (2)(a), (b), or (c) of this rule.

(o) The total NO_X allowances allocated for any control period in accordance with subparagraphs (3)(e), (f), and (g) of this paragraph shall not exceed the State Trading Program Budget as determined by the applicable, approved State Implementation Plan.

(4) Compliance Supplement Pool. In addition to the CAIR NO_X allowances allocated under paragraph (3) of this rule, the Department may allocate for the control period in 2009 up to 10,166 CAIR NO_X allowances from the Compliance Supplement Pool to CAIR NO_X units.

(a) For any CAIR NO_X unit that achieves actual NO_X emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable during such years, the CAIR designated representative of the unit may request early reduction credits, and allocation of CAIR NO_X allowances from the compliance supplement pool under paragraph (4) of this rule for such early reduction credits, in accordance with the following:

1. Each CAIR NO_X unit for which the owner or operator requests any early reduction credits under subparagraph (a)4. of this paragraph shall monitor NO_X emissions in accordance with rule 335-3-8-.23 starting January 1 of the control period prior to the first control period for which such early reduction credits are requested and during each control period for which the early reduction credits are requested. The unit's monitoring system availability shall be not less than 90 percent, and the unit must be in compliance with any applicable State or Federal emissions or emissions related requirements, during the control period prior to the first control period for which such early reduction credits are requested. Early reduction credits may only be requested for emissions reductions that are not required by Alabama's State Implementation Plan or the Clean Air Act.

2. The NO_X emission rate and heat input under subparagraphs (a)3. through 4. of this paragraph shall be determined in accordance with rule 335-3-8-.23.

3. Each CAIR NO_X unit for which the owner or operator requests any early reduction credits under subparagraph (a)4. of this paragraph shall reduce its NO_X emission rate, for each control period for which early reduction credits are requested, to below the lesser of any State or Federal requirement or the NO_X emission rate required under 40 CFR 76, including emission averaging under 40 CFR 76.11.

4. The CAIR designated representative of a CAIR NO_X unit that meets the requirements of subparagraphs (a)1. and 3. of this paragraph may submit to the Department a request for early reduction credits for the unit based on NO_X emission rate reductions made by the unit in the control period for 2007 or 2008 in accordance with subparagraph (a)3. of this paragraph.

(i) Except as provided in subparagraph (a)4.(ii) below, in the early reduction credit request, the CAIR designated representative may request early reduction credits for such control period in an amount equal to the unit's heat input for such control period multiplied by the difference between the following:

(I) The unit's actual average NO_X emission rate in the control period prior to the first control period for which early reduction credits are requested; and,

(II) The unit's NO_X emission rate for the control period in which the early reductions occurred, divided by 2000 lb/ton, and rounded to the nearest ton.

(ii) The CAIR designated representative of such CAIR NO_X unit shall submit to the Department by May 1, 2009 a request, in a format specified by the Department, for allocation of an amount of CAIR NO_X allowances from the compliance supplement pool not exceeding the sum of the amounts (in tons) of the unit's NO_X emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable during such years, determined in accordance with rule 335-3-8-.23. NO_X Budget Sources, or sources applicable under rule 335-3-8-.05(4), may earn Early Reduction

~~Credits only for reductions outside of the ozone season (May 1 – September 30). Sources which are not NO_x Budget Sources, may earn Early Reduction Credits at any time during 2007 and 2008.~~

~~5. Notwithstanding other provisions regarding the distribution of allowances from the compliance supplement pool, operators of CAIR NO_x sources may receive allowances from the compliance supplement pool only to the extent that the total number of allowances issued to such operators does not exceed 15% of the total number of NO_x allowances issued to that operator from the initial allowance allocation of all sources controlled by that operator.~~

~~(i) Any allowance remaining in the compliance supplement pool after distribution under subparagraph (b)2. of this paragraph will be allocated on a pro rata basis to operators of CAIR NO_x units that, because of the limitation in subparagraph (a)5. of this paragraph, did not receive all allocations requested under subparagraph (a)4. of this paragraph. No unit shall be issued more allowances than requested under subparagraph of (a)4. of this paragraph.~~

~~(b) The Department will review each request under subparagraph (a) of this paragraph submitted by May 1, 2009 and will allocate CAIR NO_x allowances for the control period in 2009 to CAIR NO_x units in the State and covered by such request as follows:~~

~~1. Upon receipt of each such request, the Department will make any necessary adjustments to the request to ensure that the amount of the CAIR NO_x allowances requested meets the requirements of subparagraph (a) of this paragraph.~~

~~2. If the State's compliance supplement pool has an amount of CAIR NO_x allowances not less than the total amount of CAIR NO_x allowances in all such requests (as adjusted under subparagraph (b)1. of this paragraph), the Department will allocate to each CAIR NO_x unit covered by such requests the amount of CAIR NO_x allowances requested [as adjusted under subparagraph (b)1. of this paragraph].~~

~~3. If the State's compliance supplement pool has a smaller amount of CAIR NO_x allowances than the total amount of CAIR NO_x allowances in all such requests [as adjusted under subparagraph (b)1. of this paragraph], the Department will allocate CAIR NO_x allowances to each CAIR NO_x unit covered by such requests according to the following formula and rounding to the nearest whole allowance as appropriate:~~

~~Unit's allocation = Unit's adjusted allocation × (State's compliance supplement pool ÷ Total adjusted allocations for all units)~~

~~Where:~~

~~"Unit's allocation" is the amount of CAIR NO_x allowances allocated to the unit from the State's compliance supplement pool.~~

"Unit's adjusted allocation" is the amount of CAIR NO_x allowances requested for the unit under subparagraph (a) of this paragraph, as adjusted under subparagraph (b)1. of this paragraph.

"State's compliance supplement pool" is the amount of CAIR NO_x allowances in the State's compliance supplement pool.

"Total adjusted allocations for all units" is the sum of the amounts of allocations requested for all units under subparagraph (a) of this paragraph, as adjusted under subparagraph (b)1. of this paragraph.

4. By November 30, 2009, the Department will determine, and submit to the Administrator, the allocations under paragraph (b)2. or 3. of this paragraph.

5. By January 1, 2010, the Administrator will record the allocations under subparagraph (b)4. of this paragraph.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

335-3-8-.21 REPEAL ~~CAIR NO_x Allowance Tracking System.~~ Reserved.

~~(1) Reserved.~~

~~(2) Establishment of accounts.~~

~~(a) Compliance accounts. Except as provided in rule 335-3-8-.24(5)(e), upon receipt of a complete certificate of representation under rule 335-3-8-.17(4), the Administrator will establish a compliance account for the CAIR NO_x source for which the certificate of representation was submitted unless the source already has a compliance account.~~

~~(b) General accounts.~~

~~1. Application for general account.~~

~~(i) Any person may apply to open a general account for the purpose of holding and transferring CAIR NO_x allowances. An application for a general account may designate one and only one CAIR authorized account representative and one and only one alternate CAIR authorized account representative who may act on behalf of the CAIR authorized account representative. The agreement by which the alternate CAIR authorized account representative is selected shall include a procedure for authorizing the alternate CAIR authorized account representative to act in lieu of the CAIR authorized account representative.~~

~~(ii) A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:~~

~~(I) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR authorized account representative and any alternate CAIR authorized account representative;~~

~~(II) Organization name and type of organization, if applicable;~~

~~(III) A list of all persons subject to a binding agreement for the CAIR authorized account representative and any alternate CAIR authorized account representative to represent their ownership interest with respect to the CAIR NO_x allowances held in the general account;~~

~~(IV) The following certification statement by the CAIR authorized account representative and any alternate CAIR authorized account representative: "I certify that I was selected as the CAIR authorized account representative or the alternate CAIR authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CAIR NO_x allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Annual Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or~~

decision issued to me by the Administrator or a court regarding the general account."

(V) The signature of the CAIR authorized account representative and any alternate CAIR authorized account representative and the dates signed.

(iii) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

2. Authorization of CAIR authorized account representative and alternate CAIR authorized account representative.

(i) Upon receipt by the Administrator of a complete application for a general account under subparagraph (b)1. of this paragraph:

(I) The Administrator will establish a general account for the person or persons for whom the application is submitted.

(II) The CAIR authorized account representative and any alternate CAIR authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CAIR NO_X allowances held in the general account in all matters pertaining to the CAIR NO_X Annual Trading Program, notwithstanding any agreement between the CAIR authorized account representative or any alternate CAIR authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CAIR authorized account representative or any alternate CAIR authorized account representative by the Administrator or a court regarding the general account.

(III) Any representation, action, inaction, or submission by any alternate CAIR authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CAIR authorized account representative.

(ii) Each submission concerning the general account shall be submitted, signed, and certified by the CAIR authorized account representative or any alternate CAIR authorized account representative for the persons having an ownership interest with respect to CAIR NO_X allowances held in the general account. Each such submission shall include the following certification statement by the CAIR authorized account representative or any alternate CAIR authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CAIR NO_X allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the

~~information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

~~(iii) The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with subparagraph (b)2.(ii) of this paragraph.~~

~~3. Changing~~ CAIR ~~authorized~~ account ~~representative and alternate~~ CAIR authorized account representative; ~~changes~~ in ~~persons with ownership~~ interest.

~~(i) The CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_x allowances in the general account.~~

~~(ii) The alternate CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_x allowances in the general account.~~

~~(iii) In the event a person having an ownership interest with respect to CAIR NO_x allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the CAIR authorized account representative and any alternate CAIR authorized account representative of the account, and the decisions and orders of the Administrator or a court, as if the person were included in such list.~~

~~(I) Within 30 days following any change in the persons having an ownership interest with respect to CAIR NO_x allowances in the general account, including the addition of a new person, the CAIR authorized account representative or any alternate CAIR authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CAIR NO_x allowances in the general account to include the change.~~

4. Objections concerning CAIR authorized account representative or alternate CAIR authorized account representative.

(i) Once a complete application for a general account under subparagraph (b)1. of this paragraph has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under subparagraph (b)1. of this paragraph is received by the Administrator.

(ii) Except as provided in subparagraph (b)3.(i) or (ii) of this paragraph, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account shall affect any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative or the finality of any decision or order by the Administrator under the CAIR NO_X Annual Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account, including private legal disputes concerning the proceeds of CAIR NO_X allowance transfers.

5. Delegation by CAIR authorized account representative and alternate CAIR authorized account representative.

(i) A CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under rules 335-3-8-.21 and 335-3-8-.22.

(ii) An alternate CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under rules 335-3-8-.21 and 335-3-8-.22.

(iii) In order to delegate authority to make an electronic submission to the Administrator in accordance with subparagraph (b)5.(i) or (ii) of this paragraph, the CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(I) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR authorized account representative or alternate CAIR authorized account representative;

(II) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an "agent");

(III) For each such natural person, a list of the type or types of electronic submissions under subparagraph (b)5.(i) or (ii) of this paragraph for which authority is delegated to him or her;

(IV) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: "I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR authorized account representative or alternate CAIR authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 96.151(b)(5)(iv) shall be deemed to be an electronic submission by me."; and

(V) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 96.151 (b)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 96.151 (b)(5) is terminated."

(iv) A notice of delegation submitted under subparagraph (b)5.(iii) of this paragraph shall be effective, with regard to the CAIR authorized account representative or alternate CAIR authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in subparagraph (b)5.(iii)(IV) of this paragraph and made in accordance with a notice of delegation effective under subparagraph (b)5.(iv) of this paragraph shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

(c) Account identification. The Administrator will assign a unique identifying number to each account established under subparagraph (a) or (b) of this paragraph.

(3) Responsibilities of CAIR authorized account representative. Following the establishment of a CAIR NO_X Allowance Tracking System account, all submissions to the Administrator pertaining to the account,

~~including, but not limited to, submissions concerning the deduction or transfer of CAIR NO_x allowances in the account, shall be made only by the CAIR authorized account representative for the account.~~

~~(4) Recordation of CAIR NO_x allowance allocations.~~

~~(a) By September 30, 2007, The Administrator will record in the CAIR NO_x source's compliance account the CAIR NO_x allowances allocated for the CAIR NO_x units at the source, as submitted by the Department in accordance with rule 335-3-8-.20(2)(a), for the control periods in 2009, 2010, and 2011.~~

~~(b) By December 1, 2008 and December 1 of every third year thereafter, the Administrator will record in the CAIR NO_x source's compliance account the CAIR NO_x allowances allocated for the CAIR NO_x units at the source, as submitted by the Department in accordance with rule 335-3-8-.20(2)(b) and (c), for the control periods in the three years after the last year for which NOx allowances were previously recorded.~~

~~(c) Serial numbers for allocated CAIR NO_x allowances. When recording the allocation of CAIR NO_x allowances for a CAIR NO_x unit in a compliance account, the Administrator will assign each CAIR NO_x allowance a unique identification number that will include digits identifying the year of the control period for which the CAIR NO_x allowance is allocated.~~

~~(5) Compliance with CAIR NO_x emissions limitation.~~

~~(a) Allowance transfer deadline. The CAIR NO_x allowances are available to be deducted for compliance with a source's CAIR NO_x emissions limitation for a control period in a given calendar year only if the CAIR NO_x allowances:~~

~~1. Were allocated for the control period in the year or a prior year; and~~

~~2. Are held in the compliance account as of the allowance transfer deadline for the control period or are transferred into the compliance account by a CAIR NO_x allowance transfer correctly submitted for recordation under rule 335-3-8-.22(1) and (2) by the allowance transfer deadline for the control period.~~

~~(b) Deductions for compliance.~~

~~1. Following the recordation, in accordance with rule 335-3-8-.22(2), of CAIR NO_x allowance transfers submitted for recordation in a source's compliance account by the allowance transfer deadline for a control period, the Administrator will deduct from the compliance account CAIR NO_x allowances available under subparagraph (a) of this paragraph in order to determine whether the source meets the CAIR NO_x emissions limitation for the control period, as follows:~~

~~(i) Until the amount of CAIR NO_x allowances deducted equals the number of tons of total nitrogen oxides emissions, determined in accordance~~

with rule 335-3-8-.23, from all CAIR NO_x units at the source for the control period; or

(ii) If there are insufficient CAIR NO_x allowances to complete the deductions in subparagraph (b)1. of this paragraph, until no more CAIR NO_x allowances available under subparagraph (a) of this paragraph remain in the compliance account.

(c) Identification of CAIR NO_x allowances by serial number.

1. The CAIR authorized account representative for a source's compliance account may request that specific CAIR NO_x allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with subparagraph (b) or (d) of this paragraph. Such request shall be submitted to the Administrator by the allowance transfer deadline for the control period and include, in a format prescribed by the Administrator, the identification of the CAIR NO_x source and the appropriate serial numbers.

2. First-in, first-out. The Administrator will deduct CAIR NO_x allowances under subparagraph (b) or (d) of this paragraph from the source's compliance account, in the absence of an identification or in the case of a partial identification of CAIR NO_x allowances by serial number under subparagraph (c)1. of this paragraph, on a first-in, first-out (FIFO) accounting basis in the following order:

(i) Any CAIR NO_x allowances that were allocated to the units at the source, in the order of recordation; and then

(ii) Any CAIR NO_x allowances that were allocated to any entity and transferred and recorded in the compliance account pursuant to rule 335-3-8-.22, in the order of recordation.

(d) Deductions for excess emissions.

1. After making the deductions for compliance under subparagraph (b) of this paragraph for a control period in a calendar year in which the CAIR NO_x source has excess emissions, the Administrator will deduct from the source's compliance account an amount of CAIR NO_x allowances, allocated for the control period in the immediately following calendar year, equal to three times the number of tons of the source's excess emissions.

2. Any allowance deduction required under subparagraph (d)1. of this paragraph shall not affect the liability of the owners and operators of the CAIR NO_x source or the CAIR NO_x units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violations, as ordered under the Clean Air Act or applicable State law.

(e) Recordation of deductions. The Administrator will record in the appropriate compliance account all deductions from such an account under subparagraph (b) and (d) of this paragraph and rule 335-3-8-.24.

(f) Administrator's action on submissions.

1. The Administrator may review and conduct independent audits concerning any submission under the CAIR NO_X Annual Trading Program and make appropriate adjustments of the information in the submissions.

2. The Administrator may deduct CAIR NO_X allowances from or transfer CAIR NO_X allowances to a source's compliance account based on the information in the submissions, as adjusted under subparagraph (f)1. of this paragraph, and record such deductions and transfers.

(6) Banking.

(a) CAIR NO_X allowances may be banked for future use or transfer in a compliance account or a general account in accordance with subparagraph (b) of this paragraph.

(b) Any CAIR NO_X allowance that is held in a compliance account or a general account will remain in such account unless and until the CAIR NO_X allowance is deducted or transferred under paragraphs (5) or (7) of this rule, or rule 335-3-8-.22 or 335-3-8-.24.

(7) Account error. The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any CAIR NO_X Allowance Tracking System account. Within 10 business days of making such correction, the Administrator will notify the CAIR authorized account representative for the account.

(8) Closing of general accounts.

(a) The CAIR authorized account representative of a general account may submit to the Administrator a request to close the account, which shall include a correctly submitted allowance transfer under rule 335-3-8-.22(1) and (2) for any CAIR NO_X allowances in the account to one or more other CAIR NO_X Allowance Tracking System accounts.

(b) If a general account has no allowance transfers in or out of the account for a 12 month period or longer and does not contain any CAIR NO_X allowances, the Administrator may notify the CAIR authorized account representative for the account that the account will be closed following 20 business days after the notice is sent. The account will be closed after the 20 day period unless, before the end of the 20-day period, the Administrator receives a correctly submitted transfer of CAIR NO_X allowances into the account under rule 335-3-8-.22(1) and (2) or a statement submitted by the CAIR authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.22 REPEAL ~~CAIR NO_X Allowance Transfers.~~Reserved.

~~(1) Submission of CAIR NO_X allowance transfers. A CAIR authorized account representative seeking recordation of a CAIR NO_X allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the CAIR NO_X allowance transfer shall include the following elements, in a format specified by the Administrator:~~

~~(a) The account numbers for both the transferor and transferee accounts;~~

~~(b) The serial number of each CAIR NO_X allowance that is in the transferor account and is to be transferred; and~~

~~(c) The name and signature of the CAIR authorized account representative of the transferor account and the date signed.~~

~~(2) EPA recordation.~~

~~(a) Within 5 business days (except as provided in subparagraph (b) of this paragraph) of receiving a CAIR NO_X allowance transfer, the Administrator will record a CAIR NO_X allowance transfer by moving each CAIR NO_X allowance from the transferor account to the transferee account as specified by the request, provided that:~~

~~1. The transfer is correctly submitted under paragraph (1) of this rule; and~~

~~2. The transferor account includes each CAIR NO_X allowance identified by serial number in the transfer.~~

~~(b) A CAIR NO_X allowance transfer that is submitted for recordation after the allowance transfer deadline for a control period and that includes any CAIR NO_X allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions under rule 335-3-8-.21(5) for the control period immediately before such allowance transfer deadline.~~

~~(c) Where a CAIR NO_X allowance transfer submitted for recordation fails to meet the requirements of subparagraph (a) of this paragraph, the Administrator will not record such transfer.~~

(3) Notification.

(a) Notification of recordation. Within 5 business days of recordation of a CAIR NO_x allowance transfer under paragraph (2) of this rule, the Administrator will notify the CAIR authorized account representatives of both the transferor and transferee accounts.

(b) Notification of non-recordation. Within 10 business days of receipt of a CAIR NO_x allowance transfer that fails to meet the requirements of subparagraph (2)(a) of this rule, the Administrator will notify the CAIR authorized account representatives of both accounts subject to the transfer of:

1. A decision not to record the transfer, and

2. The reasons for such non-recordation.

(c) Nothing in this rule shall preclude the submission of a CAIR NO_x allowance transfer for recordation following notification of non-recordation.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended:

335-3-8-.23 REPEAL ~~CAIR Monitoring and Reporting.~~Reserved.

~~(1) General Requirements. The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NO_X unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this rule and in 40 CFR 75, subpart H. For purposes of complying with such requirements, the definitions in rule 335-3-8-.16(2) and in 40 CFR § 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR 75 shall be deemed to refer to the terms "CAIR NO_X unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in rule 335-3-8-.16(2). The owner or operator of a unit that is not a CAIR NO_X unit but that is monitored under 40 CFR § 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NO_X unit.~~

~~(a) Requirements for installation, certification, and data accounting. The owner or operator of each CAIR NO_X unit shall:~~

~~1. Install all monitoring systems required under this rule for monitoring NO_X mass emissions and individual unit heat input [including all systems required to monitor NO_X emission rate, NO_X concentration, stack gas moisture content, stack gas flow rate, CO_2 or O_2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR §§ 75.71 and 75.72];~~

~~2. Successfully complete all certification tests required under paragraph (2) of this rule and meet all other requirements of this rule and 40 CFR 75 applicable to the monitoring systems under subparagraph (a)1. of this paragraph; and~~

~~3. Record, report, and quality-assure the data from the monitoring systems under subparagraph (a)1. of this paragraph.~~

~~(b) Compliance deadlines. Except as provided in subparagraph (e) of this paragraph, the owner or operator shall meet the monitoring system certification and other requirements of subparagraphs (a)1. and 2. of this paragraph on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under subparagraph (a)1. of this paragraph on and after the following dates.~~

~~1. For the owner or operator of a CAIR NO_X unit that commences commercial operation before July 1, 2007, by January 1, 2008.~~

~~2. For the owner or operator of a CAIR NO_X unit that commences commercial operation on or after July 1, 2007, by the later of the following dates:~~

~~(i) January 1, 2008; or~~

~~(ii) 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation.~~

3. For the owner or operator of a CAIR NO_X unit for which construction of a new stack or flue or installation of add-on NO_X emission controls is completed after the applicable deadline under subparagraph (b)1., 2., 4., or 5. of this paragraph, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_X emissions controls.

4. Notwithstanding the dates in subparagraphs (b)1. and 2. of this paragraph, for the owner or operator of a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.24, by the date specified in rule 335-3-8-.24(5)(b).

5. Notwithstanding the dates in subparagraphs (b)1. and 2. of this paragraph, for the owner or operator of a CAIR NO_X opt-in unit under rule 335-3-8-.24, by the date on which the CAIR NO_X opt-in unit enters the CAIR NO_X Annual Trading Program as provided in rule 335-3-8-.24(5)(g).

(c) Reporting data. The owner or operator of a CAIR NO_X unit that does not meet the applicable compliance date set forth in subparagraph (b) of this rule for any monitoring system under subparagraph (a)1. of this rule shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO_X concentration, NO_X emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO_X mass emissions and heat input in accordance with 40 CFR § 75.31(b)(2) or (c)(3), under Section 2.4 of Appendix D to 40 CFR 75, or under Section 2.5 of Appendix E to 40 CFR 75, as applicable.

(d) Prohibitions.

1. No owner or operator of a CAIR NO_X unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this rule without having obtained prior written approval in accordance with paragraph (6) of this rule.

2. No owner or operator of a CAIR NO_X unit shall operate the unit so as to discharge, or allow to be discharged, NO_X emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and 40 CFR 75.

3. No owner or operator of a CAIR NO_X unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_X mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule and 40 CFR 75.

4. No owner or operator of a CAIR NO_x unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this rule, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under rule 335-3-8-.16(5) that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this rule and 40 CFR 75, by the Department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with subparagraph (2)(d)3.(i) below.

(e) Long term cold storage. The owner or operator of a CAIR NO_x unit is subject to the applicable provisions of 40 CFR 75 concerning units in long term cold storage.

(2) Initial certification and recertification procedures.

(a) The owner or operator of a CAIR NO_x unit shall be exempt from the initial certification requirements of this rule for a monitoring system under subparagraph (1)(a)1. above if the following conditions are met:

1. The monitoring system has been previously certified in accordance with 40 CFR 75; and

2. The applicable quality-assurance and quality-control requirements of 40 CFR § 75.21 and Appendix B, Appendix D, and Appendix E to 40 CFR 75 are fully met for the certified monitoring system described in subparagraph (a)1. of this paragraph.

(b) The recertification provisions of this paragraph shall apply to a monitoring system under subparagraph (1)(a)1. of this rule exempt from initial certification requirements under subparagraph (a) of this paragraph.

(c) If the Administrator has previously approved a petition under 40 CFR § 75.17(a) or (b) for apportioning the NO_x emission rate measured in a common stack or a petition under 40 CFR § 75.66 for an alternative to a requirement in 40 CFR § 75.12 or § 75.17, the CAIR designated representative shall resubmit the petition to the Administrator under subparagraph (6)(a) of this rule to determine whether the approval applies under the CAIR NO_x Annual Trading Program.

(d) Except as provided in subparagraph (a) of this paragraph, the owner or operator of a CAIR NO_x unit shall comply with the following initial

certification and recertification procedures for a continuous monitoring system (i.e., a continuous emission monitoring system and an excepted monitoring system under Appendices D and E to 40 CFR 75) under subparagraph (1)(a)1. of this rule. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR § 75.19 or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E shall comply with the procedures in subparagraph (e) or (f) of this paragraph respectively.

1. Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under subparagraph (1)(a)1. of this rule (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR § 75.20 by the applicable deadline in subparagraph (1)(b) of this rule. In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this rule in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR § 75.20 is required.

2. Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under subparagraph (1)(a)1. of this rule that may significantly affect the ability of the system to accurately measure or record NO_X mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR § 75.21 or 40 CFR 75, Appendix B, the owner or operator shall recertify the monitoring system in accordance with 40 CFR § 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR § 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO_X monitoring system under 40 CFR 75, Appendix E, under subparagraph (1)(a)1. of this rule are subject to the recertification requirements in 40 CFR § 75.20(g)(6).

3. Approval process for initial certification and recertification. Subparagraphs (d)3.(i) through (iv) of this paragraph apply to both initial certification and recertification of a continuous monitoring system under subparagraph (1)(a)1. of this rule. For recertifications, replace the words "certification" and "initial certification" with the word "recertification", replace the word "certified" with the word "recertified," and follow the procedures in 40 CFR §§ 75.20(b)(5) and (g)(7) in lieu of the procedures in subparagraph (d)3.(v) of this paragraph.

(i) Notification of certification. The CAIR designated representative shall submit to the Department, the appropriate EPA Regional Office, and the

~~Administrator written notice of the dates of certification testing, in accordance with paragraph (4) of this rule.~~

~~(ii) Certification application. The CAIR designated representative shall submit to the Department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR § 75.63.~~

~~(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR § 75.20(a)(3). A provisionally certified monitoring system may be used under the CAIR NO_x Annual Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system under subparagraph (d)3.(ii) of this paragraph. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Department.~~

~~(iv) Certification application approval process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under subparagraph (d)3.(ii) of this paragraph. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75 and is included in the certification application will be deemed certified for use under the CAIR NO_x Annual Trading Program.~~

~~(I) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.~~

~~(II) Incomplete application notice. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the CAIR designated representative must submit the additional information required to complete the certification application. If the CAIR designated representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under subparagraph (d)3.(iv)(III) of this paragraph. The 120-day review period shall not begin before receipt of a complete certification application.~~

~~(III) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR 75 or if the certification application is incomplete and the requirement for disapproval under subparagraph (d)3.(iv)(II) of this paragraph is met, then the Department will issue a written notice of disapproval of the certification~~

application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality assured data beginning with the date and hour of provisional certification [as defined under 40 CFR § 75.20(a)(3)]. The owner or operator shall follow the procedures for loss of certification in subparagraph (d)3.(v) of this paragraph for each monitoring system that is disapproved for initial certification.

(IV) Audit decertification. The Department or, for a CAIR NO_X opt-in unit or a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.24, the Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with subparagraph (3)(b) of this rule.

(v) Procedures for loss of certification. If the Department or the Administrator issues a notice of disapproval of a certification application under subparagraph (d)3.(iv)(III) of this paragraph or a notice of disapproval of certification status under subparagraph (d)3.(iv)(IV) of this paragraph, then:

(I) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) and continuing until the applicable date and hour specified under 40 CFR § 75.20(a)(5)(i) or (g)(7):

I. For a disapproved NO_X emission rate (i.e., NO_X-diluent) system, the maximum potential NO_X emission rate, as defined in 40 CFR § 72.2.

II. For a disapproved NO_X pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO_X and the maximum potential flow rate, as defined in Sections 2.1.2.1 and 2.1.4.1 of 40 CFR 75, Appendix A.

III. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO_2 concentration or the minimum potential O_2 concentration (as applicable), as defined in Sections 2.1.5, 2.1.3.1, and 2.1.3.2 of 40 CFR 75, Appendix A.

IV. For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in Section 2.4.2.1 of Appendix D to 40 CFR 75.

V. For a disapproved excepted NO_X monitoring system under Appendix E to 40 CFR 75, the fuel-specific maximum potential NO_X emission rate, as defined in 40 CFR § 72.2.

(II) The CAIR designated representative shall submit a notification of certification retest dates and a new certification application in accordance with subparagraphs (d)3.(i) and (ii) of this paragraph.

(III) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's or the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) Initial certification and recertification procedures for units using the low mass emission excepted methodology under 40 CFR § 75.19. The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under 40 CFR § 75.19 shall meet the applicable certification and recertification requirements in 40 CFR §§ 75.19(a)(2) and 75.20(h). If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in 40 CFR § 75.20(g).

(f) Certification/recertification procedures for alternative monitoring systems. The CAIR designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under 40 CFR 75, Subpart E shall comply with the applicable notification and application procedures of 40 CFR § 75.20(f).

(3) Out of control periods.

(a) Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or Appendix D or Appendix E to, 40 CFR 75.

(b) Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under paragraph (2) of this rule or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department or, for a CAIR NO_x opt-in unit or a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.24, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subparagraph, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department or the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in paragraph (2) of this rule for each disapproved monitoring system.

(4) Notifications. The CAIR designated representative for a CAIR NO_X unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR § 75.61.

(5) Recordkeeping and reporting.

(a) General provisions. The CAIR designated representative shall comply with all recordkeeping and reporting requirements in this paragraph, the applicable recordkeeping and reporting requirements under 40 CFR § 75.73, and the requirements of rule 335-3-8-.17(1)(e).

(b) Monitoring Plans. The owner or operator of a CAIR NO_X unit shall comply with requirements of 40 CFR § 75.73(c) and (e) and, for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.24, 335-3-8-.24(4), and 335-3-8-.24(5)(a).

(c) Certification Applications. The CAIR designated representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under paragraph (2) of this rule, including the information required under 40 CFR § 75.63.

(d) Quarterly reports. The CAIR designated representative shall submit quarterly reports, as follows:

1. The CAIR designated representative shall report the NO_X mass emissions data and heat input data for the CAIR NO_X unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering January 1, 2008 through March 31, 2008;

(ii) For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subparagraph (1)(b) of this rule, unless that quarter is the third or fourth quarter of 2007, in which case reporting shall commence in the quarter covering January 1, 2008 through March 31, 2008;

(iii) Notwithstanding subparagraphs (d)1.(i) and (ii) of this paragraph, for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.24, the calendar quarter corresponding to the date specified in rule 335-3-8-.24(5)(b); and

(iv) Notwithstanding subparagraphs (d)1.(i) and (ii) of this paragraph, for a CAIR NO_X opt-in unit under rule 335-3-8-.24, the calendar quarter corresponding to the date on which the CAIR NO_X opt-in unit enters the CAIR NO_X Annual Trading Program as provided in rule 335-3-8-.24(5)(g).

2. The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR § 75.73(f).

3. For CAIR NO_X units that are also subject to an Acid Rain emissions limitation or the CAIR NO_X Ozone Season Trading Program, CAIR SO_2 Trading Program, quarterly reports shall include the applicable data and information required by 40 CFR 75, Subparts F through I as applicable, in addition to the NO_X mass emission data, heat input data, and other information required by this rule.

(e) Compliance certification. The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

1. The monitoring data submitted were recorded in accordance with the applicable requirements of this rule and 40 CFR 75, including the quality assurance procedures and specifications; and

2. For a unit with add on NO_X emission controls and for all hours where NO_X data are substituted in accordance with 40 CFR § 75.34(a)(1), the add on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under Appendix B to 40 CFR 75 and the substitute data values do not systematically underestimate NO_X emissions.

(6) Petitions.

(a) Except as provided in subparagraph (b)1. of this paragraph, the CAIR designated representative of a CAIR NO_X unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Administrator requesting approval to apply an alternative to any requirement of this rule. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent that the petition is approved in writing by the Administrator, in consultation with the Department.

(b) The CAIR designated representative of a CAIR NO_X unit that is not subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Department and the Administrator requesting approval to apply an alternative to any requirement of this rule. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent that the petition is approved in writing by both the Department and the Administrator.

1. The CAIR designated representative of a CAIR NO_X unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Department and the Administrator requesting approval

~~to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR § 75.72. Application of an alternative to any such requirement is in accordance with this rule only to the extent that the petition is approved in writing by both the Department and the Administrator.~~

~~**Author:** Ronald W. Gore.~~
~~**Statutory Authority:** Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-28-14, 22-28-19, and 22-28-20.~~
~~**History:** Effective Date: July 11, 2006.~~
~~**Amended:** April 3, 2007; March 31, 2009.~~

335-3-8-.24 REPEAL ~~CAIR NO_x Opt-in Units.~~ Reserved.

~~(1) Applicability. A CAIR NO_x opt-in unit must be a unit that:~~

~~(a) Is located in the State;~~

~~(b) Is not a CAIR NO_x unit under rule 335-3-8-.16(4) and is not covered by a retired unit exemption under rule 335-3-8-.16(5) that is in effect;~~

~~(c) Is not covered by a retired unit exemption under 40 CFR § 72.8 that is in effect;~~

~~(d) Has or is required or qualified to have a Title V operating permit or other federally enforceable permit; and~~

~~(e) Vents all of its emissions to a stack and can meet the monitoring, recordkeeping, and reporting requirements of rule 335-3-8-.23.~~

~~(2) General.~~

~~(a) Except as otherwise provided in rules 335-3-8-.16(1) through (4), (6) and (7), and rule 335-3-8-.17 through 335-3-8-.18 and 335-3-8-.21 through 335-3-8-.24, a CAIR NO_x opt-in unit shall be treated as a CAIR NO_x unit for purposes of applying rules 335-3-8-.16 through 335-3-8-.18 and 335-3-8-.21 through 335-3-8-.24.~~

~~(b) Solely for purposes of applying, as provided in this rule, the requirements of rule 335-3-8-.23 to a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under this rule, such unit shall be treated as a CAIR NO_x unit before issuance of a CAIR opt-in permit for such unit.~~

~~(3) CAIR designated representative. Any CAIR NO_x opt-in unit, and any unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under this rule, located at the same source as one or more CAIR NO_x units shall have the same CAIR designated representative and alternate CAIR designated representative as such CAIR NO_x units.~~

~~(4) Applying for CAIR opt in permit.~~

~~(a) Applying for initial CAIR opt in permit. The CAIR designated representative of a unit meeting the requirements for a CAIR NO_x opt-in unit in paragraph (1) of this rule may apply for an initial CAIR opt-in permit at any time, except as provided under subparagraphs (7)(f) and (g) of this rule, and, in order to apply, must submit the following:~~

~~1. A complete CAIR permit application under rule 335-3-8-.18(3);~~

~~2. A certification, in a format specified by the Department, that the unit:~~

(i) Is not a CAIR NO_x unit under rule 335-3-8-.16(4) and is not covered by a retired unit exemption under rule 335-3-8-.16(5) that is in effect;

(ii) Is not covered by a retired unit exemption under 40 CFR § 72.8 that is in effect;

(iii) Vents all of its emissions to a stack, and

(iv) Has documented heat input for more than 876 hours during the 6 months immediately preceding submission of the CAIR permit application under rule 335-3-8-.18(3);

3. A monitoring plan in accordance with rule 335-3-8-.23;

4. A complete certificate of representation under rule 335-3-8-.17(4) consistent with paragraph (3) of this rule, if no CAIR designated representative has been previously designated for the source that includes the unit; and

5. A statement, in a format specified by the Department, whether the CAIR designated representative requests that the unit be allocated CAIR NO_x allowances under subparagraph (9)(b) or (c) of this rule (subject to the conditions in subparagraphs (5)(h) and (7)(g) of this rule). If allocation under subparagraph (9)(c) of this rule is requested, this statement shall include a statement that the owners and operators of the unit intend to repower the unit before January 1, 2015 and that they will provide, upon request, documentation demonstrating such intent.

(b) Duty to reapply.

1. The CAIR designated representative of a CAIR NO_x opt-in unit shall submit a complete CAIR permit application under rule 335-3-8-.18(3) to renew the CAIR opt-in unit permit in accordance with rule 335-3-8-.18(2)(b).

2. Unless the Department issues a notification of acceptance of withdrawal of the CAIR NO_x opt-in unit from the CAIR NO_x Annual Trading Program in accordance with paragraph (7) of this rule, the CAIR NO_x opt-in unit shall remain subject to the requirements for a CAIR NO_x opt-in unit, even if the CAIR designated representative for the CAIR NO_x opt-in unit fails to submit a CAIR permit application that is required for renewal of the CAIR opt-in permit under subparagraph (b)1 of this paragraph.

(5) Opt in process. The Department will issue or deny a CAIR opt-in permit for a unit for which an initial application for a CAIR opt-in permit under paragraph (4) above is submitted in accordance with the following:

(a) Interim review of monitoring plan. The Department and the Administrator will determine, on an interim basis, the sufficiency of the monitoring plan accompanying the initial application for a CAIR opt-in permit under paragraph (4) of this rule. A monitoring plan is sufficient, for purposes of interim review, if the plan appears to contain information demonstrating that the NO_x emissions rate and heat input of the unit and all other applicable

parameters are monitored and reported in accordance with rule 338-3-8-.23. A determination of sufficiency shall not be construed as acceptance or approval of the monitoring plan.

(b) Monitoring and reporting.

1. If the Department and the Administrator determine that the monitoring plan is sufficient under subparagraph (a) of this paragraph, the owner or operator shall monitor and report the NO_X emissions rate and the heat input of the unit and all other applicable parameters, in accordance with rule 335-3-8-.23, starting on the date of certification of the appropriate monitoring systems under rule 335-3-8-.23 and continuing until a CAIR opt-in permit is denied under subparagraph (f) of this paragraph or, if a CAIR opt-in permit is issued, the date and time when the unit is withdrawn from the CAIR NO_X Annual Trading Program in accordance with paragraph (7) of this rule.

2. The monitoring and reporting under subparagraph (b)1. of this paragraph shall include the entire control period immediately before the date on which the unit enters the CAIR NO_X Annual Trading Program under subparagraph (g) of this paragraph, during which period monitoring system availability must not be less than 90 percent under rule 335-3-8-.23 and the unit must be in full compliance with any applicable State or Federal emissions or emissions related requirements.

3. To the extent the NO_X emissions rate and the heat input of the unit are monitored and reported in accordance with rule 335-3-8-.23 for one or more control periods, in addition to the control period under subparagraph (b)2. of this paragraph, during which control periods monitoring system availability is not less than 90 percent under rule 335-3-8-.23 and the unit is in full compliance with any applicable State or Federal emissions or emissions-related requirements and which control periods begin not more than 3 years before the unit enters the CAIR NO_X Annual Trading Program under subparagraph (g) of this paragraph, such information shall be used as provided in subparagraphs (c) and (d) of this paragraph.

(c) Baseline heat input. The unit's baseline heat input shall equal:

1. If the unit's NO_X emissions rate and heat input are monitored and reported for only one control period, in accordance with subparagraph (b)1. or 2. of this rule, the unit's total heat input (in mmBtu) for the control period; or

2. If the unit's NO_X emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs (b)1., 2. and 3. of this paragraph, the average of the amounts of the unit's total heat input (in mmBtu) for the control periods under subparagraphs (b)2. and (b)3. of this rule.

(d) Baseline NO_X emission rate. The unit's baseline NO_X emission rate shall equal:

1. If the unit's NO_x emissions rate and heat input are monitored and reported for only one control period, in accordance with subparagraphs (b)1. and 2. of this paragraph, the unit's NO_x emissions rate (in lb/mmBtu) for the control period;

2. If the unit's NO_x emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs (b)1., 2. and 3. of this paragraph, and the unit does not have add-on NO_x emission controls during any such control periods, the average of the amounts of the unit's NO_x emissions rate (in lb/mmBtu) for the control periods under subparagraphs (b)2. and (b)3. of this paragraph; or

3. If the unit's NO_x emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs (b)1., 2. and 3. of this paragraph, and the unit has add-on NO_x emission controls during any such control periods, the average of the amounts of the unit's NO_x emissions rate (in lb/mmBtu) for such control periods during which the unit has add-on NO_x emission controls.

(e) Issuance of CAIR opt-in permit. After calculating the baseline heat input and the baseline NO_x emissions rate for the unit under subparagraphs (c) and (d) of this paragraph and if the Department determines that the CAIR designated representative shows that the unit meets the requirements for a CAIR NO_x opt-in unit in paragraph (1) of this rule and meets the elements certified in subparagraph (4)(a)2. of this rule, the Department will issue a CAIR opt-in permit. The Department will provide a copy of the CAIR opt-in permit to the Administrator, who will then establish a compliance account for the source that includes the CAIR NO_x opt-in unit unless the source already has a compliance account.

(f) Issuance of denial of CAIR opt-in permit. Notwithstanding subparagraphs (a) through (e) of this paragraph, if at any time before issuance of a CAIR opt-in permit for the unit, the Department determines that the CAIR designated representative fails to show that the unit meets the requirements for a CAIR NO_x opt-in unit in paragraph (1) of this rule or meets the elements certified in subparagraph (4)(a)2., the Department will issue a denial of a CAIR opt-in permit for the unit.

(g) Date of entry into CAIR NO_x Annual Trading Program. A unit for which an initial CAIR opt-in permit is issued by the Department shall become a CAIR NO_x opt-in unit, and a CAIR NO_x unit, as of the later of January 1, 2009 or January 1 of the first control period during which such CAIR opt-in permit is issued.

(h) Repowered CAIR NO_x opt-in unit.

1. If the CAIR designated representative requests, and the Department issues a CAIR opt-in permit providing for, allocation to a CAIR NO_x opt-in unit of CAIR NO_x allowances under subparagraph (9)(c) of this rule and such unit is repowered after its date of entry into the CAIR NO_x Annual Trading Program

~~under subparagraph (g) of this paragraph, the repowered unit shall be treated as a CAIR NO_x opt in unit replacing the original CAIR NO_x opt in unit, as of the date of start up of the repowered unit's combustion chamber.~~

~~2. Notwithstanding subparagraphs (c) and (d) of this paragraph, as of the date of start up under subparagraph (h)1. of this paragraph, the repowered unit shall be deemed to have the same date of commencement of operation, date of commencement of commercial operation, baseline heat input, and baseline NO_x emission rate as the original CAIR NO_x opt in unit, and the original CAIR NO_x opt in unit shall no longer be treated as a CAIR NO_x opt in unit or a CAIR NO_x unit.~~

~~(6) CAIR opt in permit contents.~~

~~(a) Each CAIR opt in permit will contain:~~

~~1. All elements required for a complete CAIR permit application under rule 335-3-8-.18(3);~~

~~2. The certification in subparagraph (4)(a)2. of this rule;~~

~~3. The unit's baseline heat input under subparagraph (5)(c) of this rule;~~

~~4. The unit's baseline NO_x emission rate under subparagraph (5)(d) of this rule;~~

~~5. A statement whether the unit is to be allocated CAIR NO_x allowances under subparagraph (9)(b) or (c) of this rule (subject to the conditions in subparagraphs (5)(h) and (7)(g) of this rule);~~

~~6. A statement that the unit may withdraw from the CAIR NO_x Annual Trading Program only in accordance with paragraph (7) of this rule; and~~

~~7. A statement that the unit is subject to, and the owners and operators of the unit must comply with, the requirements of paragraph (8) of this rule.~~

~~(b) Each CAIR opt in permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.16(2) and, upon recordation by the Administrator under rules 335-3-8-.21, 335-3-8-.22 or 335-3-8-.24, every allocation, transfer, or deduction of CAIR NO_x allowances to or from the compliance account of the source that includes a CAIR NO_x opt in unit covered by the CAIR opt in permit.~~

~~(c) The CAIR opt in permit shall be included, in a format specified by the Department, in the CAIR permit for the source where the CAIR NO_x opt in unit is located and in a Title V operating permit or other federally enforceable permit for the source.~~

~~(7) Withdrawal from CAIR NO_x Annual Trading Program. Except as provided under subparagraph (g) of this paragraph, a CAIR NO_x opt in unit may withdraw from the CAIR NO_x Annual Trading Program, but only if the~~

Department issues a notification to the CAIR designated representative of the CAIR NO_x opt-in unit of the acceptance of the withdrawal of the CAIR NO_x opt-in unit in accordance with subparagraph (d) of this paragraph.

(a) Requesting withdrawal. In order to withdraw a CAIR NO_x opt-in unit from the CAIR NO_x Annual Trading Program, the CAIR designated representative of the CAIR NO_x opt-in unit shall submit to the Department a request to withdraw effective as of midnight of December 31 of a specified calendar year, which date must be at least 4 years after December 31 of the year of entry into the CAIR NO_x Annual Trading Program under subparagraph (5)(g). The request must be submitted no later than 90 days before the requested effective date of withdrawal.

(b) Conditions for withdrawal. Before a CAIR NO_x opt-in unit covered by a request under subparagraph (a) of this paragraph may withdraw from the CAIR NO_x Annual Trading Program and the CAIR opt-in permit may be terminated under subparagraph (c) of this paragraph, the following conditions must be met:

1. For the control period ending on the date on which the withdrawal is to be effective, the source that includes the CAIR NO_x opt-in unit must meet the requirement to hold CAIR NO_x allowances under rule 335-3-8-.16(6)(c) and cannot have any excess emissions.

2. After the requirement for withdrawal under subparagraph (b)1. of this paragraph is met, the Administrator will deduct from the compliance account of the source that includes the CAIR NO_x opt-in unit CAIR NO_x allowances equal in amount to and allocated for the same or a prior control period as any CAIR NO_x allowances allocated to the CAIR NO_x opt-in unit under paragraph (9) of this rule for any control period for which the withdrawal is to be effective. If there are no remaining CAIR NO_x units at the source, the Administrator will close the compliance account, and the owners and operators of the CAIR NO_x opt-in unit may submit a CAIR NO_x allowance transfer for any remaining CAIR NO_x allowances to another CAIR NO_x Allowance Tracking System in accordance with rule 335-3-8-.22.

(c) Notification.

1. After the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are met (including deduction of the full amount of CAIR NO_x allowances required), the Department will issue a notification to the CAIR designated representative of the CAIR NO_x opt-in unit of the acceptance of the withdrawal of the CAIR NO_x opt-in unit as of midnight on December 31 of the calendar year for which the withdrawal was requested.

2. If the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are not met, the Department will issue a notification to the CAIR designated representative of the CAIR NO_x opt-in unit that the CAIR NO_x opt-in unit's request to withdraw is denied. Such CAIR NO_x opt-in unit shall continue to be a CAIR NO_x opt-in unit.

(d) Permit amendment. After the Department issues a notification under subparagraph (c)1. of this paragraph that the requirements for withdrawal have been met, the Department will revise the CAIR permit covering the CAIR NO_X opt-in unit to terminate the CAIR opt-in permit for such unit as of the effective date specified under subparagraph (c)1. of this paragraph. The unit shall continue to be a CAIR NO_X opt-in unit until the effective date of the termination and shall comply with all requirements under the CAIR NO_X Annual Trading Program concerning any control periods for which the unit is a CAIR NO_X opt in unit, even if such requirements arise or must be complied with after the withdrawal takes effect.

(e) Reapplication upon failure to meet conditions of withdrawal. If the Department denies the CAIR NO_X opt in unit's request to withdraw, the CAIR designated representative may submit another request to withdraw in accordance with subparagraphs (a) and (b) of this paragraph.

(f) Ability to reapply to the CAIR NO_X Annual Trading Program. Once a CAIR NO_X opt in unit withdraws from the CAIR NO_X Annual Trading Program and its CAIR opt in permit is terminated under this rule, the CAIR designated representative may not submit another application for a CAIR opt in permit under paragraph (4) of this rule for such CAIR NO_X opt in unit before the date that is 4 years after the date on which the withdrawal became effective. Such new application for a CAIR opt in permit will be treated as an initial application for a CAIR opt in permit under paragraph (5) of this rule.

(g) Inability to withdraw. Notwithstanding subparagraphs (a) through (f) of this paragraph, a CAIR NO_X opt in unit shall not be eligible to withdraw from the CAIR NO_X Annual Trading Program if the CAIR designated representative of the CAIR NO_X opt in unit requests, and the Department issues a CAIR NO_X opt in permit providing for, allocation to the CAIR NO_X opt in unit of CAIR NO_X allowances under subparagraph (9)(c) of this rule.

(8) Change in regulatory status.

(a) Notification. If a CAIR NO_X opt in unit becomes a CAIR NO_X unit under rule 335-3-8-.16(4), then the CAIR designated representative shall notify in writing the Department and the Administrator of such change in the CAIR NO_X opt in unit's regulatory status, within 30 days of such change.

(b) Department's and Administrator's actions.

1. If a CAIR NO_X opt in unit becomes a CAIR NO_X unit under rule 335-3-8-.16(4), the Department will revise the CAIR NO_X opt in unit's CAIR opt in permit to meet the requirements of a CAIR permit under rule 335-3-8-.18(4), and remove the CAIR opt in permit provisions, as of the date on which the CAIR NO_X opt in unit becomes a CAIR NO_X unit under rule 335-3-8-.16(4).

2. The Administrator will deduct from the compliance account of the source that includes the CAIR NO_X opt in unit that becomes a CAIR NO_X unit

~~under rule 335-3-8-.16(4), CAIR NO_x allowances equal in amount to and allocated for the same or a prior control period as:~~

~~(i) Any CAIR NO_x allowances allocated to the CAIR NO_x opt-in unit under paragraph (9) of this rule for any control period after the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4); and~~

~~(ii) If the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4) is not December 31, the CAIR NO_x allowances allocated to the CAIR NO_x opt-in unit under paragraph (9) of this rule for the control period that includes the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4), multiplied by the ratio of the number of days, in the control period, starting with the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4) divided by the total number of days in the control period and rounded to the nearest whole allowance as appropriate.~~

~~3. The CAIR designated representative shall ensure that the compliance account of the source that includes the CAIR NO_x opt-in unit that becomes a CAIR NO_x unit under rule 335-3-8-.16(4) contains the CAIR NO_x allowances necessary for completion of the deduction under subparagraph (b)2. of this paragraph.~~

~~4. For every control period after the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4), the CAIR NO_x opt-in unit will be allocated CAIR NO_x allowances under rule 335-3-8-.20(3).~~

~~(i) If the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4) is not December 31, the following amount of CAIR NO_x allowances will be allocated to the CAIR NO_x opt-in unit (as a CAIR NO_x unit) under rule 335-3-8-.20(3) for the control period that includes the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4):~~

~~(I) The amount of CAIR NO_x allowances otherwise allocated to the CAIR NO_x opt-in unit (as a CAIR NO_x unit) under rule 335-3-8-.20(3) for the control period multiplied by;~~

~~(II) The ratio of the number of days, in the control period, starting with the date on which the CAIR NO_x opt-in unit becomes a CAIR NO_x unit under rule 335-3-8-.16(4), divided by the total number of days in the control period; and~~

~~(III) Rounded to the nearest whole allowance as appropriate.~~

~~(9) CAIR NO_x allowance allocations to CAIR NO_x opt-in units.~~

~~(a) Timing requirements.~~

1. When the CAIR NO_X opt-in permit is issued under subparagraph (5)(e) of this rule, the Department will allocate CAIR NO_X allowances to the CAIR NO_X opt-in unit, and submit to the Administrator the allocation for the control period in which a CAIR NO_X opt-in unit enters the CAIR NO_X Annual Trading Program under subparagraph (5)(g) of this rule, in accordance with subparagraph (b) or (c) of this paragraph.

2. By no later than October 31 of the control period after the control period in which a CAIR NO_X opt-in unit enters the CAIR NO_X Annual Trading Program under subparagraph (5)(g) and October 31 of each year thereafter, the Department will allocate CAIR NO_X allowances to the CAIR NO_X opt-in unit, and submit to the Administrator the allocation for the control period that includes such submission deadline and in which the unit is a CAIR NO_X opt-in unit, in accordance with subparagraph (b) or (c) of this paragraph.

(b) Calculation of allocation. For each control period for which a CAIR NO_X opt-in unit is to be allocated CAIR NO_X allowances, the Department will allocate in accordance with the following procedures:

1. The heat input (in mmBtu) used for calculating the CAIR NO_X allowance allocation will be the lesser of:

(i) The CAIR NO_X opt-in unit's baseline heat input determined pursuant to subparagraph (5)(c) of this rule; or

(ii) The CAIR NO_X opt-in unit's heat input, as determined in accordance with rule 335-3-8-.23, for the immediately prior control period, except when the allocation is being calculated for the control period in which the CAIR NO_X opt-in unit enters the CAIR NO_X Annual Trading Program under subparagraph (5)(g) of this rule.

2. The NO_X emission rate (in lb/mmBtu) used for calculating CAIR NO_X allowance allocations will be the lesser of:

(i) The CAIR NO_X opt-in unit's baseline NO_X emissions rate (in lb/mmBtu) determined pursuant to subparagraph (5)(d) and multiplied by 70 percent; or

(ii) The most stringent State or Federal NO_X emissions limitation applicable to the CAIR NO_X opt-in unit at any time during the control period for which CAIR NO_X allowances are to be allocated.

3. The Department will allocate CAIR NO_X allowances to the CAIR NO_X opt-in unit in an amount equaling the heat input under subparagraph (b)1. of this paragraph, multiplied by the NO_X emission rate under subparagraph (b)2. of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

(c) Notwithstanding subparagraph (b) of this paragraph and if the CAIR designated representative requests, and the Department issues a CAIR opt-in permit (based on a demonstration of the intent to repower stated under

paragraph (4)(a)5. of this rule) providing for, allocation to a CAIR NO_x opt-in unit of CAIR NO_x allowances under this paragraph (subject to the conditions in subparagraphs (5)(h) and (7)(g) of this rule), the Department will allocate to the CAIR NO_x opt-in unit as follows:

1. For each control period in 2009 through 2014 for which the CAIR NO_x opt-in unit is to be allocated CAIR NO_x allowances,

(i) The heat input (in mmBtu) used for calculating CAIR NO_x allowance allocations will be determined as described in subparagraph (b)1. of this rule.

(ii) The NO_x emission rate (in lb/mmBtu) used for calculating CAIR NO_x allowance allocations will be the lesser of:

(I) The CAIR NO_x opt-in unit's baseline NO_x emissions rate (in lb/mmBtu) determined pursuant to subparagraph (5)(d) of this rule; or

(II) The most stringent State or Federal NO_x emissions limitation applicable to the CAIR NO_x opt-in unit at any time during the control period in which the CAIR NO_x opt-in unit enters the CAIR NO_x Annual Trading Program under subparagraph (5)(g) of this rule.

(iii) The Department will allocate CAIR NO_x allowances to the CAIR NO_x opt-in unit in an amount equaling the heat input under subparagraph (c)1.(i) of this paragraph, multiplied by the NO_x emission rate under subparagraph (c)1.(ii) of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

2. For each control period in 2015 and thereafter for which the CAIR NO_x opt-in unit is to be allocated CAIR NO_x allowances,

(i) The heat input (in mmBtu) used for calculating the CAIR NO_x allowance allocations will be determined as described in subparagraph (b)1. of this paragraph.

(ii) The NO_x emission rate (in lb/mmBtu) used for calculating the CAIR NO_x allowance allocation will be the lesser of:

(I) 0.15 lb/mmBtu;

(II) The CAIR NO_x opt-in unit's baseline NO_x emissions rate (in lb/mmBtu) determined pursuant to subparagraph (5)(d) of this rule; or

(III) The most stringent State or Federal NO_x emissions limitation applicable to the CAIR NO_x opt-in unit at any time during the control period for which CAIR NO_x allowances are to be allocated.

(iii) The Department will allocate CAIR NO_x allowances to the CAIR NO_x opt-in unit in an amount equaling the heat input under subparagraph (c)2.(i) of this paragraph, multiplied by the NO_x emission rate under subparagraph

(c)2.(ii) of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

(d) Recordation.

1. The Administrator will record, in the compliance account of the source that includes the CAIR NO_x opt-in unit, the CAIR NO_x allowances allocated by the Department to the CAIR NO_x opt-in unit under subparagraph (a)1. of this paragraph.

2. By December 1 of the control period in which a CAIR NO_x opt-in unit enters the CAIR NO_x Annual Trading Program under subparagraph (5)(g) of this rule and December 1 of each year thereafter, the Administrator will record, in the compliance account of the source that includes the CAIR NO_x opt-in unit, the CAIR NO_x allowances allocated by the Department to the CAIR NO_x opt-in unit under subparagraph (a)2. of this paragraph.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

335-3-8-.25 REPEAL ~~CAIR NO_x Ozone Season Trading Program.~~Reserved.

~~(1) Purpose. This rule and rules 335-3-8-.26 through 335-3-8-.33 establish general provisions and the designated representative, permitting, allowance, monitoring, and opt-in provisions for the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program for Alabama's State Implementation Program, under section 110 of the Clean Air Act and 40 CFR § 51.123, as a means of mitigating interstate transport of ozone and nitrogen oxides. The State authorizes the Administrator to assist the State in implementing the CAIR NO_x Ozone Season Trading Program by carrying out the functions set forth for the Administrator in such requirements.~~

~~(2) Definitions. For the purpose of rules 335-3-8-.25 through 335-3-8-.33, the following definitions apply:~~

~~(a) "Account Number" means the identification number given by the Administrator to each CAIR NO_x Ozone Season Allowance Tracking System account.~~

~~(b) "Acid Rain Emissions Limitation" means, as defined in 40 CFR § 72.2 and incorporated by reference in ADEM Admin. Code r. 335-3-18-.01, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under Title IV of the CAA.~~

~~(c) "Acid Rain Program" means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under Title IV of the CAA and 40 CFR 72 through 78.~~

~~(d) "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.~~

~~(e) "Allocate or Allocation" means, with regard to CAIR NO_x Ozone Season allowances, the determination by the Department of the amount of such CAIR NO_x Ozone Season allowances to be initially credited to a CAIR NO_x Ozone Season unit under rule 335-3-8-.25 or .338-3-8-.33(9), or the determination by the Administrator or other permitting authority of the amount of CAIR NO_x Ozone Season allowances to be initially credited to a CAIR NO_x Ozone Season unit, new unit set aside, or other entity.~~

~~(f) "Allowance Transfer Deadline" means, for a control period, midnight of November 30 (if it is a business day), or midnight of the first business day thereafter (if November 30 is not a business day), immediately following the control period and is the deadline by which a CAIR NO_x Ozone Season allowance transfer must be submitted for recordation in a CAIR NO_x Ozone Season source's compliance account in order to be used to meet the source's CAIR NO_x Ozone Season emissions limitation for such control period in accordance with rule 335-3-8-.30(5).~~

~~(g) "Alternate CAIR Designated Representative" means, for a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source, the~~

natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with rules 335-3-8-.26 and 335-3-8-.33, to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NO_X Ozone Season Trading Program. If the CAIR NO_X Ozone Season source is also a CAIR NO_X source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_X Annual Trading Program. If the CAIR NO_X Ozone Season source is also a CAIR SO_2 source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_X Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the alternate designated representative under the Acid Rain Program.

(h) "Automated Data Acquisition and Handling System or DAHS" means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under rule 335-3-8-.32, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by rule 335-3-8-.32.

(i) "Biomass" means:

1. Any organic material grown for the purpose of being converted to energy;

2. Any organic byproduct of agriculture that can be converted into energy; or

3. Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantible material, and that is;

(i) A forest related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure treated, chemically treated, or painted wood products), and landscape or right-of-way tree trimmings.

(j) "Boiler" means an enclosed fossil or other fuel fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(k) "Bottoming Cycle Cogeneration Unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

(l) "CAIR Authorized Account Representative" means, with regard to a general account, a responsible natural person who is authorized, in accordance with rules 335-3-8-.26, 335-3-8-.30 and 335-3-8-.33, to transfer and otherwise dispose of CAIR NO_x Ozone Season allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

(m) "CAIR Designated Representative" means, for a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with rules 335-3-8-.26 and 335-3-8-.33, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR NO_x source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x Annual Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR SO_2 source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_x Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program.

(n) "CAIR NO_x Annual Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AA through II of 40 CFR 96 and 40 CFR § 51.123(o)(1) or (2) or established by the Administrator in accordance with subparts AA through II of 40 CFR 97 and 40 CFR §§ 51.123(p) and 52.35, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

(o) "CAIR NO_x Ozone Season Allowance" means a limited authorization issued by the Department under rules 335-3-8-.29 or 335-3-8-.33(9) or issued by the Administrator or other permitting authority under provisions of a State Implementation Plan that are approved under 40 CFR §51.123 (aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd), or (ee), or under 40 CFR 97, Subpart EEEE or § 97.388, to emit one ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NO_x Ozone Season Trading Program or a limited authorization issued by the Department for a control period during 2003 through 2008 under the NO_x Budget Trading Program to emit one ton of nitrogen oxides during a control period, provided that the provision in 40 CFR § 51.121(b)(2)(ii)(E) shall not be used in applying this definition and the limited authorization shall not have been used to meet the allowance-holding requirement under the NO_x Budget Trading Program. An authorization to emit nitrogen oxides that is not issued under provisions of rules 335-3-8-.25 through 335-3-8-.33 or other provisions of a State Implementation Plan that are approved under 40 CFR § 51.123(aa)(1) or (2) [and (bb)(1)], (bb)(2), (dd), or (ee) or 40 CFR 97, Subpart EEEE or § 97.388 or under the NO_x Budget Trading Program as described in the prior sentence shall not be a CAIR NO_x Ozone Season allowance.

(p) "CAIR NO_x Ozone Season Allowance Deduction or Deduct CAIR NO_x Ozone Season Allowances" means the permanent withdrawal of CAIR NO_x Ozone Season allowances by the Administrator from a compliance account, e.g., in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NO_x Ozone Season units at a CAIR NO_x Ozone Season source for a control period, determined in accordance with rule 335-3-8-.32, or to account for excess emissions.

(q) "CAIR NO_x Ozone Season Allowance Tracking System" means the system by which the Administrator records allocations, deductions, and transfers of CAIR NO_x Ozone Season allowances under the CAIR NO_x Ozone Season Trading Program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

(r) "CAIR NO_x Ozone Season Allowance Tracking System Account" means an account in the CAIR NO_x Ozone Season Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of CAIR NO_x Ozone Season allowances.

(s) "CAIR NO_x Ozone Season Allowances Held or Hold CAIR NO_x Ozone Season Allowances" means the CAIR NO_x Ozone Season allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with rules 335-3-8-.30, 335-3-8-.31, and 335-3-8-.33, in a CAIR NO_x Ozone Season Allowance Tracking System account.

(t) "CAIR NO_x Ozone Season Emissions Limitation" means, for a CAIR NO_x Ozone Season source, the tonnage equivalent, in NO_x emissions in a control period, of the CAIR NO_x Ozone Season allowances available for deduction for the source under rule 335-3-8-.30(5)a) and (b) for a control period.

(u) "CAIR NO_x Ozone Season Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAAA through IIII of 40 CFR 96 and 40 CFR § 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2) or (dd) or established by the Administrator in accordance with subparts AAAA through IIII of 40 CFR 97 and 40 CFR §§ 51.123(ee) and 52.35, as a means of mitigating interstate transport of ozone and nitrogen oxides.

(v) "CAIR NO_x Ozone Season Source" means a source that includes one or more CAIR NO_x Ozone Season units.

(w) "CAIR NO_x Ozone Season Unit" means a unit that is subject to the CAIR NO_x Ozone Season Trading Program under paragraph (4) of this rule and, except for purposes of paragraph (5) of this rule and rule 335-3-8-.29, a CAIR NO_x Ozone Season opt-in unit under rule 335-3-8-.33.

(x) "CAIR NO_x Source" means a source that is subject to the CAIR NO_x Annual Trading Program.

(y) "CAIR Permit" means the legally binding and federally enforceable written document issued by the Department under rule 335-3-8-.27, including any permit revisions, specifying the CAIR NO_x Ozone Season Trading Program requirements applicable to a CAIR NO_x Ozone Season source, to each CAIR NO_x Ozone Season unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

(z) "CAIR SO_2 Source" means a source that is subject to the CAIR SO_2 Trading Program.

(aa) "CAIR SO_2 Trading Program" means a multi-state sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAA through III of 40 CFR 96 and 40 CFR § 51.124(o)(1) or (2) or established by the Administrator in accordance with subparts AAA through III of 40 CFR 97 and 40 CFR §§ 51.124(r) and 52.36, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

(bb) "Clean Air Act or CAA" means the Clean Air Act, 42 U.S.C. 7401, et seq.

(cc) "Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

(dd) "Coal Derived Fuel" means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

(ee) "Coal Fired" means:

1. Except for purposes of rule 335-3-8-.29, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year; or

2. For purposes of rule 335-3-8-.29, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

(ff) "Cogeneration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

2. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity –

(i) For a topping-cycle cogeneration unit,

(I). Useful thermal energy not less than 5 percent of total energy output; and

(II) Useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming cycle cogeneration unit, useful power not less than 45 percent of total energy input;

3. Provided that the total energy input under subparagraphs 2.(i)(II) and 2.(ii) of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

(gg) "Combustion Turbine" means:

1. An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

2. If the enclosed device under subparagraph 1. of this definition is combined cycle, any associated duct burner, heat recovery steam generator and steam turbine.

(hh) "Commence Commercial Operation" means, with regard to a unit:

1. To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in paragraph (5) of this rule and rule 335-3-8-.33(5)(h).

(i) For a unit that is a CAIR NO_X Ozone Season unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CAIR NO_X Ozone Season unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subparagraphs 1. or 2. of this definition as appropriate.

2. Notwithstanding subparagraph 1. of this definition and except as provided in paragraph (5) of this rule, for a unit that is not a CAIR NO_X Ozone

~~Season unit under paragraph (4) of this rule on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subparagraph 1. of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_x Ozone Season unit under paragraph (4) of this rule.~~

~~(i) For a unit with a date for commencement of commercial operation as defined in subparagraph 2. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall be treated as the same unit.~~

~~(ii) For a unit with a date for commencement of commercial operation as defined in subparagraph 2. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subparagraph 1. or 2. of this definition as appropriate.~~

~~3. Notwithstanding subparagraphs 1. and 2. of this definition, for a unit not serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.~~

~~(ii) "Commence Operation" means:~~

~~1. To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber, except as provided in rule 335-3-8-.33(5)(h).~~

~~(i) For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in subparagraph 1. of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.~~

~~(ii) For a unit that is replaced by a unit at the same source (e.g., repowered) after the date the unit commences operation as defined in subparagraph 1. of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in subparagraph 1., 2., or 3. of this definition as appropriate, except as provided in rule 335-3-8-.33(5)(h).~~

~~2. Notwithstanding subparagraph 1. of this definition, and solely for purposes of rule 335-3-8-.32, for a unit that is not a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii) on the later of November 15, 1990 or the date the unit commences operation as defined in subparagraph 1. of this definition and that subsequently becomes such a CAIR NO_x Ozone Season unit,~~

the unit's date for commencement of operation shall be the date on which the unit becomes a CAIR NO_X Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii).

(i) For a unit with a date of commencement of operation as defined in subparagraph 2. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of operation as defined in subparagraph 2. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in subparagraph 1. or 2. of this definition as appropriate.

(jj) "Common Stack" means a single flue through which emissions from 2 or more units are exhausted.

(kk) "Compliance Account" means a CAIR NO_X Ozone Season Allowance Tracking System account, established by the Administrator for a CAIR NO_X Ozone Season source under rule 335-3-8-.30 or 335-3-8-.33, in which any CAIR NO_X Ozone Season allowance allocations for the CAIR NO_X Ozone Season units at the source are initially recorded and in which are held any CAIR NO_X Ozone Season allowances available for use for a control period in order to meet the source's CAIR NO_X Ozone Season emissions limitation in accordance with rule 335-3-8-.30(5).

(ll) "Continuous Emission Monitoring System or CEMS" means the equipment required under rule 335-3-8-.32 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of nitrogen oxides emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR 75. The following systems are the principal types of continuous emission monitoring systems required under rule 335-3-8-.32:

1. A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

2. A nitrogen oxides concentration monitoring system, consisting of a NO_X pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X emissions, in parts per million (ppm);

3. A nitrogen oxides emission rate (or NO_X diluent) monitoring system, consisting of a NO_X pollutant concentration monitor, a diluent gas (CO_2 or O_2)

monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2, and NO_x emission rate, in pounds per million British thermal units (lb/mmBtu);

4. A moisture monitoring system, as defined in 40 CFR § 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O;

5. A carbon dioxide monitoring system, consisting of a CO_2 pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

6. An oxygen monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2, in percent O_2.

(mm) "Control Period or Ozone Season" means the period beginning May 1 of a calendar year, except as provided in paragraph (6)(c)2. of this rule, and ending on September 30 of the same year, inclusive.

(nn) "Department" means the Alabama Department of Environmental Management, authorized by the Administrator to issue or revise permits to meet the requirements of the CAIR NO_x Ozone Season Trading Program in accordance with rule 335-3-8-.27.

(oo) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the CAIR designated representative and as determined by the Administrator in accordance with rule 335-3-8-.32.

(pp) "Excess Emissions" means any ton of nitrogen oxides emitted by the CAIR NO_x Ozone Season units at a CAIR NO_x Ozone Season source during a control period that exceeds the CAIR NO_x Ozone Season emissions limitation for the source.

(qq) "Fossil Fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

(rr) "Fossil Fuel Fired" means, with regard to a unit under paragraph (4)(a)1.(i), combusting any amount of fossil fuel in any calendar year.

With regard to a unit, under paragraph (4)(a)1.(ii), fossil fuel fired means:

1. The combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel actually combusted comprises more than 50 percent of the annual heat input on a Btu basis during any year starting in 1995 or, if a

~~unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or~~

~~2. The combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year; provided that the unit shall be "fossil-fuel-fired" as of the date, during such year, on which the unit begins combusting fossil fuel.~~

~~(ss) "Fuel Oil" means any petroleum based fuel (including diesel fuel or petroleum derivatives such as oil tar) and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid, or gaseous state.~~

~~(tt) "General Account" means a CAIR NO_x Ozone Season Allowance Tracking System account, established under rule 335-3-8-.30, that is not a compliance account.~~

~~(uu) "Generator" means a device that produces electricity.~~

~~(vv) "Gross Electrical Output" means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).~~

~~(ww) "Heat Input" means, with regard to a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the CAIR designated representative and determined by the Administrator in accordance with rule 335-3-8-.32 and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.~~

~~(xx) "Heat Input Rate" means the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.~~

~~(yy) "Life-of-the-Unit, Firm Power Contractual Arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:~~

~~1. For the life of the unit;~~

~~2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or~~

3. For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(zz) "Maximum Design Heat Input" means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

(aaa) "Monitoring System" means any monitoring system that meets the requirements of rule 335-3-8-.32, including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under 40 CFR 75.

(bbb) "Most Stringent State or Federal NO_x Emissions Limitation" means, with regard to a unit, the lowest NO_x emissions limitation (in terms of lb/mmBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

(ccc) "Nameplate Capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

(ddd) "NO_x Budget Trading Program" means a multi-state nitrogen oxides air pollution control and emission reduction program established pursuant to 40 CFR § 51.121(p), as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.

(eee) "Oil Fired" means, for purposes of rule 335-3-8-.29, combusting fuel oil for more than 15.0 percent of the annual heat input in a specified year and not qualifying as coal fired.

(fff) "Operator" means any person who operates, controls, or supervises a CAIR NO_x Ozone Season unit or a CAIR NO_x Ozone Season source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

(ggg) "Owner" means any of the following persons:

1. With regard to a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit at a source, respectively:

(i) Any holder of any portion of the legal or equitable title in a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit;

(ii) Any holder of a leasehold interest in a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit; or

(iii) Any purchaser of power from a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit under a life of the unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CAIR NO_x Ozone Season unit; or

2. With regard to any general account, any person who has an ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NO_x Ozone Season allowances.

(hhh) "Potential Electrical Output Capacity" means 33 percent of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

(iii) "Receive or Receipt of" means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.

(jjj) "Recordation", "Record", or "Recorded" means, with regard to CAIR NO_x Ozone Season allowances, the movement of CAIR NO_x Ozone Season allowances by the Administrator into or between CAIR NO_x Ozone Season Allowance Tracking System accounts, for purposes of allocation, transfer, or deduction.

(kkk) "Reference Method" means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR § 75.22 [incorporated by reference in ADEM Admin. Code r. 335-3-10-.03(1)].

(lll) "Replacement, replace, or replaced" means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

(mmm) "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

1. Atmospheric or pressurized fluidized bed combustion;

~~2. Integrated gasification combined cycle;~~

~~3. Magnetohydrodynamics;~~

~~4. Direct and indirect coal-fired turbines;~~

~~5. Integrated gasification fuel cells; or~~

~~6. As determined by the Administrator in consultation with the Secretary of Energy, a derivative of one or more of the technologies under subparagraphs 1. through 5. of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.~~

~~(nnn) "Serial Number" means, for a CAIR NO_x Ozone Season allowance, the unique identification number assigned to each CAIR NO_x Ozone Season allowance by the Administrator.~~

~~(ooo) "Sequential Use of Energy" means:~~

~~1. For a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or~~

~~2. For a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.~~

~~(ppp) "Solid waste incineration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.~~

~~(qqq) "Source" means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of section 502(c) of the Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility."~~

~~(rrr) "State" means~~

~~1. The State of Alabama, the Environmental Management Commission, and the Commission's representatives; or,~~

~~2. One of the States or the District of Columbia that adopts the CAIR NO_x Ozone Season Trading Program pursuant to 40 CFR § 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd).~~

~~(sss) "State Ozone Season Trading Program Budget" means the total number of NO_x tons apportioned to all CAIR NO_x Ozone Season units in the State, in accordance with the CAIR NO_x Ozone Season Trading Program, for use in a given control period.~~

(ttt) "Submit or Serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

1. In person;

2. By United States Postal Service; or

3. By other means of dispatch or transmission and delivery. Compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(uuu) "Title V Operating Permit" means a "Major Source Operating Permit" as defined and issued under chapter 335-3-16.

(vvv) "Title V Operating Permit Regulations" means the "Major Source Operating Permit" regulations in chapter 335-3-16 that the Administrator has approved as meeting the requirements of Title V of the Clean Air Act and 40 CFR 70 or 71.

(www) "Ton" means 2,000 pounds. For the purpose of determining compliance with the CAIR NO_x Ozone Season emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions (or the mass equivalent of the recorded hourly emission rates) in accordance with rule 335-3-8-.32, but with any remaining fraction of a ton equal to or greater than 0.50 tons deemed to equal one ton and any remaining fraction of a ton less than 0.50 tons deemed to equal zero tons.

(xxx) "Topping Cycle Cogeneration" unit means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

(yyy) "Total Energy Input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,

HHV = higher heating value of fuel in Btu/ lb,

W = Weight % of moisture in fuel, and

H = Weight % of hydrogen in fuel.

(zzz) "Total Energy Output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

(aaaa) "Unit" means a stationary, fossil-fuel-fired boiler or combustion turbine or other stationary, fossil-fuel-fired combustion device.

(bbbb) "Unit Operating Day" means a calendar day in which a unit combusts any fuel.

(cccc) "Unit Operating Hour or Hour of Unit Operation" means an hour in which a unit combusts any fuel.

(dddd) "Useful Power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

(eeee) "Useful Thermal Energy" means, with regard to a cogeneration unit, thermal energy that is:

1. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

2. Used in a heating application (e.g., space heating or domestic hot water heating); or

3. Used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(ffff) "Utility Power Distribution System" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

(3) Measurements, abbreviations, and acronyms. Measurements, abbreviations, and acronyms used in this rule and rules 335-3-8-.26 through 335-3-8-.33 are defined as follows:

(a) Btu -- British thermal unit

(b) CO_2 -- carbon dioxide

(c) H_2O -- water

(d) Hg -- mercury

(e) hr -- hour

(f) kW -- kilowatt electrical

(g) kWh—kilowatt hour

(h) lb—pound

(i) mmBtu—million Btu

(j) MWe—megawatt electrical

(k) MWh—megawatt hour

(l) NO_x—nitrogen oxides

(m) O_2—oxygen

(n) ppm—parts per million

(o) scfh—standard cubic feet per hour

(p) SO_2—sulfur dioxide

(q) yr—year

(4) Applicability.

(a) Except as provided in subparagraph (b) of this paragraph:

1. The following units in the State of Alabama shall be CAIR NO_x Ozone Season units, and any source that includes one or more such units shall be a CAIR NO_x Ozone Season source, subject to the requirements of this rule and rules 335-3-8-.26 through 335-3-8-.32:

(i) Any stationary, fossil fuel fired boiler or stationary, fossil fuel fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale shall be a CAIR NO_x EGU unit.

(ii) The following units in the Counties of Autauga, Bibb, Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, Dallas, Dekalb, Elmore, Etowah, Fayette, Franklin, Greene, Hale, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Lee, Limestone, Macon, Madison, Marion, Marshall, Morgan, Perry, Pickens, Randolph, Russell, Shelby, St. Clair, Sumter, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston shall be CAIR NO_x non-EGU units, and any source that includes one or more such units shall be a CAIR NO_x non-EGU source, subject to the requirements of this rule:

(I) Any unit that is not a unit under subparagraph (a)1.(i) and that any time on or after January 1, 1995, serves a generator with a nameplate capacity greater than 25 MWe and sells any amount of electricity; or,

(II) Any unit that is not a unit under subparagraph (a)1.(i) of this paragraph and that has a maximum design heat input greater than 250 mmBtu/hr.

2. If a stationary boiler or stationary combustion turbine that, under subparagraph (a)1.(i) of this paragraph, is not a CAIR NO_X Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CAIR NO_X Ozone Season EGU unit as provided in subparagraph (a)1.(i) of this paragraph on the first date on which it both combusts fossil fuel and serves such generator.

(b) The units in the State that meet the requirements set forth in subparagraph (b)1. or (b)2. of this paragraph shall not be CAIR NO_X Ozone Season units under subparagraph (a)1.(i) or (a)2. of this paragraph.

1. Any unit that is a CAIR NO_X Ozone Season unit under subparagraph (a)1.(i) or 2. of this paragraph:

(i) Qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

(ii) Not serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(iii) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_X Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subparagraph (b)1.(ii) of this paragraph.

2. Any unit that is a CAIR NO_X Ozone Season unit under subparagraph (a)1. or 2. of this paragraph commencing operation:

(i) Before January 1, 1985:

(I) Qualifying as a solid waste incineration unit; and

(II) With an average annual fuel consumption of non-fossil fuel for 1985 – 1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

(ii) On or after January 1, 1985:

~~(I) Qualifying as a solid waste incineration unit; and~~

~~(II) With an average annual fuel consumption of non-fossil fuel for the first 3 calendar years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).~~

~~(iii) If a unit qualifies as a solid waste incineration unit and meets the requirements of subparagraph (b)2.(i) or (ii) of this paragraph for at least 3 consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_X Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more.~~

~~(5) Retired Unit Exemption.~~

~~(a) Any CAIR NO_X Ozone Season unit that is permanently retired and is not a CAIR NO_X Ozone Season opt-in unit shall be exempt from the CAIR NO_X Ozone Season Trading Program, except for the provisions of this paragraph, paragraphs (2), (3), (4), (7) and (8), subparagraphs (6)(c)4. through 7. of this rule, and rules 335-3-8-.26 and 335-3-8-.29 through 335-3-8-.31.~~

~~1. The exemption under subparagraph (a) of this paragraph shall become effective the day on which the CAIR NO_X Ozone Season unit is permanently retired. Within 30 days of the unit's permanent retirement, the CAIR designated representative shall submit a statement to the Department otherwise responsible for administering any CAIR permit for the unit and shall submit a copy of the statement to the Administrator. The statement shall state, in a format prescribed by the Department, that the unit was permanently retired on a specific date and will comply with the requirements of subparagraph (b) of this paragraph.~~

~~2. After receipt of the statement under subparagraph (a)1. of this paragraph, the Department will amend any permit under rule 335-3-8-.27 covering the source at which the unit is located to add the provisions and requirements of the exemption under subparagraphs (a) and (b) of this paragraph.~~

~~(b) Special provisions.~~

~~1. A unit exempt under subparagraph (a) of this paragraph shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.~~

~~2. The Department will assign CAIR NO_X Ozone Season allowances to the Retired Unit Allowance Pool under rule 335-3-8-.29(3)(c)2. for a unit exempt under subparagraph (a) of this paragraph.~~

~~3. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under subparagraph (a) of this~~

paragraph shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Department or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

4. The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under subparagraph (a) of this paragraph shall comply with the requirements of the CAIR NO_x Ozone Season Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

5. A unit exempt under subparagraph (a) of this paragraph and located at a source that is required, or but for this exemption would be required, to have a Title V operating permit or other federally enforceable permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR permit application under rule 335-3-8-.27(3) for the unit not less than 18 months [or such lesser time provided under the Department's major source operating permit regulations for final action on a permit application] before the later of January 1, 2009 or the date on which the unit resumes operation.

6. Loss of exemption.

(i) On the earlier of the following dates, a unit exempt under subparagraph (a) of this paragraph shall lose its exemption:

(I) The date on which the CAIR designated representative submits a CAIR permit application for the unit under subparagraph (b)5. or (b)6. of this paragraph;

(II) The date on which the CAIR designated representative is required under subparagraph (b)5. of this paragraph to submit a CAIR permit application for the unit; or

(III) The date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR permit application for the unit.

7. For the purpose of applying monitoring, reporting, and recordkeeping requirements under rule 335-3-8-.32, a unit that loses its exemption under subparagraph (a) of this paragraph shall be treated as a unit that commences commercial operation on the first date on which the unit resumes operation.

(6) Standard requirements.

(a) Permit Requirements.

1. The CAIR designated representative of each CAIR NO_x Ozone Season source required to have a Title V operating permit or other federally enforceable

permit and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or other federally enforceable permit at the source shall:

(i) Submit to the Department a complete CAIR permit application under rule 335-3-8-.27(3) in accordance with the deadlines specified in rule 335-3-8-.27(2); and

(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

2. The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or synthetic minor operating permit and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or other federally enforceable permit at the source shall have a CAIR permit issued by the Department under rule 335-3-8-.27 for the source and operate the source and the unit in compliance with such CAIR permit.

3. Except as provided in rule 335-3-8-.33, the owners and operators of a CAIR NO_x Ozone Season source that is not otherwise required to have a Title V operating permit or other federally enforceable permit and each CAIR NO_x Ozone Season unit that is not otherwise required to have a Title V operating permit or other federally enforceable permit are not required to submit a CAIR permit application, and to have a CAIR permit, under rule 335-3-8-.27 for such CAIR NO_x Ozone Season source and such CAIR NO_x Ozone Season unit.

(b) Monitoring, reporting, and recordkeeping requirements.

1. The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of rule 335-3-8-.32.

2. The emissions measurements recorded and reported in accordance with rule 335-3-8-.32 shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under subparagraph (c) of this paragraph.

(c) Nitrogen oxides ozone season emission requirements.

1. As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under rule 335-3-8-.30(5)(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with rule 335-3-8-.32.

2. A CAIR NO_x Ozone Season unit shall be subject to the requirements under subparagraph (c)1. of this paragraph for the control period starting on

~~the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under rule 335-3-8-.32(1)(b)1., 2., 3., or 7. and for each control period thereafter.~~

~~3. A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under subparagraph (c)1. of this paragraph, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.~~

~~4. CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with rules 335-3-8-.30, 335-3-8-.31, and 335-3-8-.33.~~

~~5. A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under paragraph (5) of this rule and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.~~

~~6. A CAIR NO_x Ozone Season allowance does not constitute a property right.~~

~~7. Upon recordation by the Administrator under rule 335-3-8-.30, 335-3-8-.31, or 335-3-8-.33, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.~~

~~(d) Excess emissions requirements. If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:~~

~~1. The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under rule 335-3-8-.30(5)(d)1. and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under rule 335-3-8-.30(5)(d)2.; and~~

~~2. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this rule, the Clean Air Act, and applicable State law.~~

~~(e) Recordkeeping and reporting requirements.~~

~~1. Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended~~

for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under rule 335-3-8-.26(4) for the CAIR designated representative for the source and each CAIR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under rule 335-3-8-.26(4) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with rule 335-3-8-.32, provided that to the extent that rule 335-3-8-.32 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Ozone Season Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Ozone Season Trading Program.

2. The CAIR designated representative of a CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall submit the reports required under the CAIR NO_X Ozone Season Trading Program, including those under rule 335-3-8-.32.

(f) Liability.

1. Each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall meet the requirements of the CAIR NO_X Ozone Season Trading Program.

2. Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season source or the CAIR designated representative of a CAIR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_X Ozone Season units at the source.

3. Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season unit or the CAIR designated representative of a CAIR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the CAIR NO_X Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or an exemption under paragraph (5) of this rule shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative,

of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

(7) Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the CAIR NO_x Ozone Season Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the CAIR NO_x Ozone Season Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the CAIR NO_x Ozone Season Trading Program, falls on a weekend or a State or Federal holiday, including those designated as a holiday by the President or the Congress of the United States, or the Governor of Alabama, or as prescribed in Code of Alabama (1975), § 1-3-8, the time period shall be extended to the next business day.

(8) Appeal Procedures. The appeal procedures for decisions of the Administrator under the CAIR NO_x Ozone Season Trading Program are set forth in 40 CFR 78.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.26 REPEAL ~~CAIR Designated Representative for CAIR NO_x Ozone Season Sources.~~Reserved.

~~(1) Authorization and responsibilities of CAIR designated representative.~~

~~(a) Except as provided under paragraph (2) below, each CAIR NO_x Ozone Season source, including all CAIR NO_x Ozone Season units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NO_x Ozone Season Trading Program concerning the source or any CAIR NO_x Ozone Season unit at the source.~~

~~(b) The CAIR designated representative of the CAIR NO_x Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NO_x Ozone Season units at the source and shall act in accordance with the certification statement in subparagraph (4)(a)4.(iv) of this rule.~~

~~(c) Upon receipt by the Administrator of a complete certificate of representation under paragraph (4) of this rule, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NO_x Ozone Season source represented and each CAIR NO_x Ozone Season unit at the source in all matters pertaining to the CAIR NO_x Ozone Season Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the Department, the Administrator, or a court regarding the source or unit.~~

~~(d) No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NO_x Ozone Season Allowance Tracking System account will be established for a CAIR NO_x Ozone Season unit at a source, until the Administrator has received a complete certificate of representation under paragraph (4) of this rule for a CAIR designated representative of the source and the CAIR NO_x Ozone Season units at the source.~~

~~(e) Each submission under the CAIR NO_x Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NO_x Ozone Season source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or~~

~~omitting required statements and information, including the possibility of fine or imprisonment."~~

~~1. The Department and the Administrator will accept or act on a submission made on behalf of owner or operators of a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit only if the submission has been made, signed, and certified in accordance with subparagraph (e) of this paragraph.~~

~~(2) Alternate CAIR designated representative.~~

~~(a) A certificate of representation under paragraph (4) of this rule may designate one and only one alternate CAIR designated representative, who may act on behalf of the CAIR designated representative. The agreement by which the alternate CAIR designated representative is selected shall include a procedure for authorizing the alternate CAIR designated representative to act in lieu of the CAIR designated representative.~~

~~(b) Upon receipt by the Administrator of a complete certificate of representation under paragraph (4) of this rule, any representation, action, inaction, or submission by the alternate CAIR designated representative shall be deemed to be a representation, action, inaction, or submission by the CAIR designated representative.~~

~~(c) Except in this paragraph and subparagraphs (1)(a) and (d) and paragraphs (3), (4) and (6) of this rule, and rules 335-3-8-.25(2), 335-3-8-.30(2), and 335-3-8-.33(3) whenever the term "CAIR designated representative" is used in rules 335-3-8-.25 through 335-3-8-.33, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.~~

~~(3) Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.~~

~~(a) Changing CAIR designated representative. The CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new CAIR designated representative and the owners and operators of the CAIR NO_x Ozone Season source and the CAIR NO_x Ozone Season units at the source.~~

~~(b) Changing alternate CAIR designated representative. The alternate CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under paragraph (4) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR designated representative before the time and date when the~~

~~Administrator receives the superseding certificate of representation shall be binding on the new alternate CAIR designated representative and the owners and operators of the CAIR NO_X Ozone Season source and the CAIR NO_X Ozone Season units at the source.~~

~~(c) Changes in owners and operators.~~

~~1. In the event an owner or operator of a CAIR NO_X Ozone Season source or a CAIR NO_X Ozone Season unit is not included in the list of owners and operators in the certificate of representation under paragraph (4) of this rule, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the CAIR designated representative and any alternate CAIR designated representative of the source or unit, and the decisions and orders of the Department, the Administrator, or a court, as if the owner or operator were included in such list.~~

~~2. Within 30 days following any change in the owners and operators of a CAIR NO_X Ozone Season source, a CAIR NO_X Ozone Season unit, including the addition of a new owner or operator, the CAIR designated representative or any alternate CAIR designated representative shall submit a revision to the certificate of representation under paragraph (4) of this rule amending the list of owners and operators to include the change.~~

~~(4) Certificate of representation.~~

~~(a) A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall include the following elements in a format prescribed by the Administrator:~~

~~1. Identification of the CAIR NO_X Ozone Season source, and each CAIR NO_X Ozone Season unit at the source, for which the certificate of representation is submitted, including identification and nameplate capacity of each generator served by each such unit.~~

~~2. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR designated representative and any alternate CAIR designated representative.~~

~~3. A list of the owners and operators of the CAIR NO_X Ozone Season source and of each CAIR NO_X Ozone Season unit at the source.~~

~~4. The following certification statements by the CAIR designated representative and any alternate CAIR designated representative:~~

~~(i) "I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative, as applicable, by an agreement binding on the owners and operators of the source and each CAIR NO_X Ozone Season unit at the source."~~

(ii) "I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Ozone Season Trading Program on behalf of the owners and operators of the source and of each CAIR NO_x Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions."

(iii) "I certify that the owners and operators of the source and of each CAIR NO_x Ozone Season unit at the source shall be bound by any order issued to me by the Administrator, the Department, or a court regarding the source or unit."

(iv) "Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_x Ozone Season unit, or where a utility or industrial customer purchases power from a CAIR NO_x Ozone Season unit under a life of the unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'CAIR designated representative' or 'alternate CAIR designated representative', as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each CAIR NO_x Ozone Season unit at the source; and CAIR NO_x Ozone Season allowances and proceeds of transactions involving CAIR NO_x Ozone Season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_x Ozone Season allowances by contract, CAIR NO_x Ozone Season allowances and proceeds of transactions involving CAIR NO_x Ozone Season allowances will be deemed to be held or distributed in accordance with the contract."

5. The signature of the CAIR designated representative and any alternate CAIR designated representative and the dates signed.

(b) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(5) Objections concerning CAIR designated representative.

(a) Once a complete certificate of representation under paragraph (4) of this rule has been submitted and received, the Department and the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under paragraph (4) of this rule is received by the Administrator.

(b) Except as provided in subparagraphs (3)(a) or (b) of this rule, no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission, of the CAIR designated representative shall affect any representation, action, inaction, or submission of the CAIR designated

~~representative or the finality of any decision or order by the Department or the Administrator under the CAIR NO_x Ozone Season Trading Program.~~

~~(c) Neither the Department nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any CAIR designated representative, including private legal disputes concerning the proceeds of CAIR NO_x Ozone Season allowance transfers.~~

~~(6)~~ Delegation by CAIR ~~designated representative~~ and ~~alternate~~ CAIR ~~designated representative~~.

~~(a) A CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this rule.~~

~~(b) An alternate CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this rule.~~

~~(c) In order to delegate authority to make an electronic submission to the Administrator in accordance with subparagraph (a) or (b) of this paragraph, the CAIR designated representative or alternate CAIR designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:~~

~~(1) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR designated representative or alternate CAIR designated representative;~~

~~(2) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an "agent");~~

~~(3) For each such natural person, a list of the type or types of electronic submissions under subparagraph (a) or (b) of this paragraph for which authority is delegated to him or her; and~~

~~(4) The following certification statements by such CAIR designated representative or alternate CAIR designated representative:~~

~~(i) "I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR designated representative or alternate CAIR designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 96.315(d) shall be deemed to be an electronic submission by me."~~

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 96.315(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 96.315 is terminated."

(d) A notice of delegation submitted under subparagraph (c) of this paragraph shall be effective, with regard to the CAIR designated representative or alternate CAIR designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR designated representative or alternate CAIR designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in subparagraph (c)4.(i) of this paragraph and made in accordance with a notice of delegation effective under subparagraph (d) of this paragraph shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

335-3-8-.27 REPEAL ~~CAIR NO_x Ozone Season Permits.~~ Reserved.

~~(1) General CAIR NO_x Ozone Season Trading Program permit requirements.~~

~~(a) For each CAIR NO_x Ozone Season source required to have a Title V operating permit, or required, under rule 335-3-8-.33, to have a Title V operating permit or other federally enforceable permit, such permit shall include a CAIR permit administered by the Department. Any requirements of the CAIR permit shall be considered federally enforceable.~~

~~1. For CAIR NO_x Ozone Season sources required to have a Title V operating permit, the CAIR portion of the Title V operating permit shall be administered in accordance with the procedures under chapter 335-3-16, except as provided otherwise by this rule, rule 335-3-8-.25, or rule 335-3-8-.33. The applicable provisions of such requirements shall include, but are not limited to, those provisions addressing operating permit applications, operating permit application shield, operating permit duration, operating permit shield, operating permit issuance, operating permit revision and reopening, public participation, State review, and review by the Administrator.~~

~~(b) Each CAIR permit shall contain, with regard to the CAIR NO_x Ozone Season source and the CAIR NO_x Ozone Season units at the source covered by the CAIR permit, all applicable CAIR NO_x Ozone Season Trading Program, CAIR NO_x Annual Trading Program, and CAIR SO_2 Trading Program requirements and shall be a complete and separable portion of the Title V operating permit or other federally enforceable permit under subparagraph (1)(a) of this paragraph.~~

~~(2) Submission of CAIR permit applications.~~

~~(a) Duty to apply. The CAIR designated representative of any CAIR NO_x Ozone Season source required to have a Title V operating permit or other federally enforceable permit shall submit to the Department a complete CAIR permit application under paragraph (3) of this rule for the source covering each CAIR NO_x Ozone Season unit at the source at least 18 months [or such lesser time provided under the Department's permit regulations in rule 335-3-16 for final action on a permit application] before the later of January 1, 2009 or the date on which the CAIR NO_x Ozone Season unit commences commercial operation, except as provided in rule 335-3-8-.33(4)(a).~~

~~(b) Duty to Reapply. For a CAIR NO_x Ozone Season source required to have a Title V operating permit, the CAIR designated representative shall submit a complete CAIR permit application under paragraph (3) of this rule for the source covering each CAIR NO_x Ozone Season unit at the source to renew the CAIR permit in accordance with the Department's Title V operating permits regulations in chapter 335-3-16 addressing operating permit renewal, except as provided in rule 335-3-8-.33(4)(b).~~

~~(3) Information requirements for CAIR permit applications. A complete CAIR permit application shall include the following elements concerning the~~

CAIR NO_x Ozone Season source for which the application is submitted, in a format prescribed by the Department:

(a) Identification of the CAIR NO_x Ozone Season source;

(b) Identification of each CAIR NO_x Ozone Season unit at the CAIR NO_x Ozone Season source; and

(c) The standard requirements under rule 335-3-8-.25(6).

(4) CAIR permit contents and term.

(a) Each CAIR permit will contain, in a format prescribed by the Department, all elements required for a complete CAIR permit application under paragraph (3) of this rule.

(b) Each CAIR permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.25(2) and, upon recordation by the Administrator under rule 335-3-8-.30, 335-3-8-.31, or 335-3-8-.33, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.

(c) The term of the CAIR permit will be set by the Department, as necessary to facilitate coordination of the renewal of the CAIR permit with issuance, revision, or renewal of the CAIR NO_x Ozone Season source's Title V operating permit as applicable.

(5) CAIR permit revisions. Except as provided in subparagraph (4)(b) of this rule, the Department will revise the CAIR permit, as necessary, in accordance with the Department's Title V operating permits regulations in chapter 335-3-16 addressing permit revisions, as applicable.

(a) For a CAIR NOx Ozone Season source with a non-Title V permit, except as provided in subparagraph (4)(b) of this rule, the Department will revise the CAIR permit, as necessary, in accordance with the Department's permit regulations in chapter 335-3-16, as applicable.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-16, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

335-3-8-.29 REPEAL ~~CAIR NO_x Ozone Season Allowance Allocations.~~ Reserved.

~~(1) State Ozone Season Trading Program Budget. The State trading budget for annual allocations of CAIR NO_x Ozone Season allowances for the control periods in 2009 through 2014 is 34,510 tons and in 2015 and thereafter is 29,146 tons.~~

~~(2) Timing Requirements for CAIR NO_x Ozone Season Allowance Allocations.~~

~~(a) By October 31, 2006, the Department will submit to the Administrator, in a format prescribed by the Administrator, the CAIR NO_x Ozone Season allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in 2009, 2010, and 2011.~~

~~1. For the 2009 control period submitted to the Administrator, only the difference between the CAIR NO_x Ozone Season allowance allocations and the 2009 NOx Budget Trading Program allowance allocations will be submitted.~~

~~(b) By October 31, 2008, the Department will submit to the Administrator, in a format prescribed by the Administrator, the CAIR NO_x Ozone Season allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in 2012, 2013, and 2014.~~

~~(c) By October 31, 2011 and October 31 of every third year thereafter (i.e. 2015, 2018, etc.), the Department will submit to the Administrator, in a format prescribed by the Administrator, the CAIR NO_x Ozone Season allowance allocations, in accordance with paragraph (3) of this rule, for the control periods in the three years that are four, five, and six years, respectively, after the year of the applicable deadline for submission under this subparagraph.~~

~~(3) CAIR NO_x Ozone Season Allowance Allocations.~~

~~(a) Definitions. For the purpose of this rule, the following definitions apply:~~

~~1. Baseline CAIR NO_x Ozone Season Unit. A CAIR NO_x Ozone Season unit that either:~~

~~(i) Commenced operation on or before May 1, 2004; or~~

~~(ii) Submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before August 1, 2005.~~

~~2. Replacement CAIR NO_x Ozone Season Unit.~~

~~(i) A CAIR NO_x Ozone Season unit, which replaces at the same facility, a Baseline CAIR NO_x Ozone Season unit with the same or greater maximum design heat input capacity; or~~

~~(ii) The portion of a CAIR NO_x Ozone Season unit, which replaces at the same facility, a Baseline CAIR NO_x Ozone Season unit with the same or less maximum design heat input capacity.~~

~~3. New CAIR NO_x Ozone Season Unit.~~

~~(i) A CAIR NO_x Ozone Season unit that does not meet the definition of either Baseline CAIR NO_x Ozone Season Unit as defined in subparagraph (3)(a)1. of this paragraph or Replacement CAIR NO_x Ozone Season Unit as defined in subparagraph (3)(a)2. of this paragraph; or~~

~~(ii) The portion of a CAIR NO_x Ozone Season unit that does not meet the definition of either Baseline CAIR NO_x Ozone Season Unit or Replacement CAIR NO_x Ozone Season Unit as defined in subparagraph (3)(a)1. and (3)(a)2. of this paragraph.~~

~~(b) Determination of Heat Input.~~

~~1. The heat input (in mmBtu) used for calculating CAIR NO_x Ozone Season allowance allocations under subparagraph (2)(a) of this rule will be:~~

~~(i) For a Baseline CAIR NO_x Ozone Season unit that commenced operation on or before May 1, 2002 the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2000, 2001, 2002, 2003 and 2004; or~~

~~(ii) For a Baseline CAIR NO_x Ozone Season unit that did not commence operation on or before May 1, 2002 but did commence operation on or before May 1, 2003, the average heat input for the control periods, in which the unit operated, in 2003 and 2004; or~~

~~(iii) For a Baseline CAIR NO_x Ozone Season unit that did not commence operation on or before May 1, 2003 but did commence operation on or before May 1, 2004, the heat input for the control period in 2004; or~~

~~(iv) For a Baseline CAIR NO_x Ozone Season unit that did not commence operation on or before May 1, 2004 but had submitted a permit application to the Department that was affirmatively deemed complete by the Department in writing on or before August 1, 2005, the expected actual ozone season heat input based on actual utilization data of similar sources.~~

~~(v) For a Replacement CAIR NO_x Ozone Season unit that did not commence operation on or before May 1, 2004, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the baseline unit operated, in 2000, 2001, 2002, 2003 and 2004 for the baseline CAIR NO_x Ozone Season unit that it replaced.~~

~~(vi) For a New CAIR NO_x Ozone Season unit that did not commence operation on or before May 1, 2004, the expected actual ozone season heat input based on actual utilization data of similar sources.~~

2. The heat input (in mmBtu) used for calculating CAIR NO_X Ozone Season allowance allocations under subparagraph (2)(b) of this rule that are to be submitted to the Administrator by October 31, 2008 will be:

(i) For a Baseline or Replacement CAIR NO_X Ozone Season unit that commenced operation on or before May 1, 2005 the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2003, 2004, 2005, 2006 and 2007; or

(ii) For a Baseline or Replacement CAIR NO_X Ozone Season unit that did not commence operation on or before May 1, 2005 but did commence operation on or before May 1, 2006, the average heat input for the control periods, in which the unit operated, in 2006 and 2007; or

(iii) For a Baseline or Replacement CAIR NO_X Ozone Season unit that did not commence operation on or before May 1, 2006 but did commence operation on or before May 1, 2007, the heat input for the control period in 2007; or

(iv) For a Replacement CAIR NO_X Ozone Season unit that did not commence operation on or before May 1, 2007, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the baseline unit operated, in 2003, 2004, 2005, 2006 and 2007 for the baseline CAIR NO_X Ozone Season unit that it replaced.

(v) For a New CAIR NO_X Ozone Season unit that commenced operation on or before May 1, 2007, the average of the three (or less, if applicable) highest amounts of the unit's heat input for the control periods, in which the unit operated, in 2003, 2004, 2005, 2006 and 2007; or

(vi) For a New CAIR NO_X Ozone Season unit that did not commence operation on or before May 1, 2007, the expected actual ozone season heat input based on actual utilization data of similar sources.

3. The heat input (in mmBtu) used for calculating CAIR NO_X Ozone Season allowance allocations under subparagraph (2)(c) of this rule that are to be submitted to the Administrator by October 31, 2011 and all subsequent allocation years will be:

(i) For a Baseline CAIR NO_X Ozone Season unit, the average of the three highest (or less, if applicable) amounts of the unit's heat input, in which the unit operated, for the five most recent control periods [e.g. allocations calculated for submission to the Administrator on October 31, 2011 will be based on ozone season heat inputs from 2006, 2007, 2008, 2009 and 2010]; or

(ii) For a Replacement CAIR NO_X Ozone Season unit, the average of the three (or less, if applicable) highest amounts of the unit's heat input, in which the unit operated, for the five most recent control periods [e.g. allocations calculated for submission to the Administrator on October 31, 2011 will be based on ozone season heat inputs from 2006, 2007, 2008, 2009 and 2010]; or

(iii) For a Replacement CAIR NO_X Ozone Season unit that did not commence operation on or before May 1 of the most recent control period, the average of the three (or less, if applicable) highest amounts of the heat inputs for the control periods, in which the unit operated, in 2006, 2007, 2008, 2009 and 2010 for the baseline CAIR NO_X Ozone Season unit that it replaced.

(iv) For a New CAIR NO_X Ozone Season unit that commenced operation prior to May 1 of the most recent control period, the average of the three (or less, if applicable) highest amounts of the unit's heat input, in which the unit operated, for the five most recent control periods; or

(v) For a New CAIR NO_X Ozone Season unit that did not commence operation prior to May 1 of the most recent control period, the expected actual ozone season heat input based on actual utilization data of similar sources.

4. The unit's total heat input for the control period in each year specified under subparagraph (b) of this paragraph will be determined in accordance with 40 CFR 75 if the CAIR NO_X Ozone Season unit was otherwise subject to the requirements of 40 CFR 75 for the year, or will be based on the best available data reported to the Administrator and the Department for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

(c) Establishment of Baseline and Retired Unit Allowance Pools. At the time CAIR NO_X Ozone Season allowances are initially allocated to baseline CAIR NO_X Ozone Season units under subparagraph (e)1. of this paragraph, each unit's allocation will become that unit's "Baseline Allowance". This value will be used to calculate the following:

1. Baseline Allowance Pool. The Baseline Allowance Pool shall be calculated each time CAIR NO_X Ozone Season allowances are allocated under paragraph (2) of this rule and shall equal the State Ozone Season Trading Program Budget minus the total of the Baseline Allowances for all baseline CAIR NO_X Ozone Season units that have retired in accordance with rule 335-3-8-.25(5).

2. Retired Unit Allowance Pool. The Retired Unit Allowance Pool shall be calculated each time CAIR NO_X Ozone Season allowances are allocated under paragraph (2) of this rule and shall equal the sum of the Baseline Allowances for all CAIR NO_X Ozone Season units that have retired in accordance with rule 335-3-8-.25(5).

(i) For the 2009 control period, the Retired Unit Allowance Pool shall equal the sum of the difference between the CAIR Baseline Allowances for those CAIR NO_X Ozone Season units that were allocated allowances under the NO_X Budget Trading Program, and that have retired in accordance with rule 335-3-8-.25(5) and the 2009 allowance allocation under the NO_X Budget Trading Program for those CAIR NO_X Ozone Season units. The Department will allocate the same number of CAIR Ozone Season allowances to the CAIR NO_X Ozone Season source as calculated under the NO_X Budget Trading Program for

~~the 2009 control period to prevent sources from returning previously allocated allowances.~~

~~(d) Adjustment Ratios. To ensure that the total number of CAIR NO_X Ozone Season allowances allocated under this paragraph equals the number of tons of CAIR NO_X Ozone Season emissions in the State trading program budget, the following ratios may be applied to the calculated CAIR NO_X Ozone Season allowance allocations as appropriate.~~

~~1. 2009 Adjustment. For the 2009 control period, if a CAIR NO_X Ozone Season source that was allocated allowances under the NO_X Budget Trading Program is calculated to be allocated fewer allowances under subparagraph (3)(e)1. of this paragraph, the following adjustment shall be made:~~

~~(i) The Department will allocate the same number of CAIR Ozone Season allowances to the CAIR NO_X Ozone Season source as calculated under the NO_X Budget Trading Program to prevent sources from returning previously allocated allowances.~~

~~(ii) The Baseline Allowance Pool shall be adjusted by subtracting the total number of allowances in subparagraph (3)(d)1.(i) above. All other sources shall be allocated allowances according to subparagraph (3)(e)1. of this paragraph.~~

~~2. Baseline Adjustment Ratio. The Baseline Adjustment Ratio is the total number of CAIR NO_X Ozone Season allowances in the Baseline Allowance Pool divided by the total number of CAIR NO_X Ozone Season allowances calculated for Baseline CAIR NO_X Ozone Season units for a control period prior to any adjustments.~~

~~(e) Calculation of CAIR NO_X Ozone Season Allowances for Baseline CAIR NO_X Ozone Season Units.~~

~~1. For each control period under subparagraph (2)(a) and (b) of this rule, the Department will allocate CAIR NO_X Ozone Season allowances to all Baseline CAIR NO_X Ozone Season units in accordance with the following procedures:~~

~~(i) The Department will allocate CAIR NO_X Ozone Season allowances to each CAIR NO_X Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) or (ii)(I) in an amount equaling 0.15 lb/mmBtu, or the unit's permitted NO_X limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or (b)2. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_X Ozone Season allowance as appropriate. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_X allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_X rate will be used for allocation purposes.~~

(ii) The Department will allocate CAIR NO_x Ozone Season allowances to each CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(II) in an amount equaling 0.17 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or (b)2. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

2. For each control period under subparagraph (2)(c) of this rule, the Department will allocate CAIR NO_x Ozone Season allowances to all baseline CAIR NO_x Ozone Season units in accordance with the following procedures:

(i) The Department will allocate CAIR NO_x Ozone Season allowances to each CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) in an amount equaling 0.125 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances may be further adjusted in accordance with subparagraph (h) of this paragraph where necessary. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

(ii) The Department will allocate CAIR NO_x Ozone Season allowances to each CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(I) in an amount equaling 0.15 lb/mmBtu or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

(iii) The Department will allocate CAIR NO_x Ozone Season allowances to each CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(II) in an amount equaling 0.17 lb/mmBtu or the unit's permitted NO_x limit (expressed

~~as lb/mmBtu), whichever is less, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_X Ozone Season allowance as appropriate. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_X allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_X rate will be used for allocation purposes.~~

~~(f) Calculation of CAIR NO_X Ozone Season Allowances for Replacement CAIR NO_X Ozone Season units. For each control period under subparagraph (2)(a), (b), or (c) of this rule, after calculating CAIR NO_X Ozone Season allowances for all Baseline CAIR NO_X Ozone Season units that have not retired in accordance with rule 335-3-8-.25(5), the Department will allocate CAIR NO_X Ozone Season allowances from the Retired Unit Allowance Pool to all Replacement CAIR NO_X Ozone Season units in accordance with the following procedures:~~

~~1. For each Replacement CAIR NO_X Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a) or (b) of this rule, the number of CAIR NO_X Ozone Season allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_X limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or 2. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole NO_X allowance as appropriate. These CAIR NO_X Ozone Season allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_X allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_X rate will be used for allocation purposes.~~

~~2. For each replacement CAIR NO_X Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(c) of this rule, the number of CAIR NO_X Ozone Season allowances allocated for each applicable control period will be equal to 0.125 lb/mmBtu, or the unit's permitted NO_X limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole NO_X allowance as appropriate. These CAIR NO_X Ozone Season allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions~~

limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

3. For each Replacement CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(I) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a), (b), or (c) of this rule, the number of CAIR NO_x Ozone Season allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1., (b)2., or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

4. For each Replacement CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(II) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a), (b), or (c) of this rule, the number of CAIR NO_x Ozone Season allowances allocated for each applicable control period will be equal to 0.17 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1., (b)2., or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (i) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.

(g) Calculation of CAIR NO_x Ozone Season Allowances for New CAIR NO_x Ozone Season units. For each control period under subparagraph (2)(a), (b), or (c) of this rule, after calculating CAIR NO_x Ozone Season allowances for all

~~Baseline CAIR NO_x Ozone Season units that have not retired in accordance with rule 335-3-8-.25(5) and calculating CAIR NO_x Ozone Season allowances for all Replacement CAIR NO_x Ozone Season units, the Department will allocate CAIR NO_x Ozone Season allowances remaining in the Retired Unit Allowance Pool to all New CAIR NO_x Ozone Season units in accordance with the following procedures:~~

~~1. For each new CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a) or (b) of this rule, the number of CAIR NO_x Ozone Season allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1. or 2. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~2. For each new CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(i) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(c) of this rule, the number of CAIR NO_x Ozone Season allowances allocated for each applicable control period will be equal to 0.125 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole NO_x allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~3. For each New CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(I) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a), (b), or (c) of this rule, the number of CAIR NO_x~~

~~Ozone Season allowances allocated for each applicable control period will be equal to 0.15 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1., (b)2., or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~4. For each New CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4)(a)1.(ii)(II) that commenced operation or submitted a permit application affirmatively deemed complete by the Department in writing on or before August 1 of the year allocations are to be submitted to the Administrator under subparagraph (2)(a), (b), or (c) of this rule, the number of CAIR NO_x Ozone Season allowances allocated for each applicable control period will be equal to 0.17 lb/mmBtu, or the unit's permitted NO_x limit (expressed as lb/mmBtu), whichever is less, multiplied by the heat input determined under subparagraph (b)1., (b)2., or (b)3. of this paragraph, multiplied by the Baseline Adjustment Ratio, and then rounded to the nearest whole CAIR NO_x Ozone Season allowance as appropriate. These CAIR NO_x Ozone Season allowances will be further adjusted in accordance with subparagraph (j) of this paragraph. If a unit has multiple allowable emissions limits based on multiple operating scenarios, multiple fuels, etc., the unit's NO_x allowances may be calculated based on actual operating data during the same control periods as determined for the contributing heat inputs in subparagraph (3)(b) of this paragraph. If the division of operating data is not provided as requested by the Department, the unit's lowest permitted NO_x rate will be used for allocation purposes.~~

~~(h) Adjustment of Baseline CAIR NO_x Ozone Season Allowance Allocations. If CAIR NO_x Ozone Season allowances remain in the Retired Unit Allowance Pool after allocations are made to all Replacement and New CAIR NO_x Ozone Season units in accordance with subparagraphs (f) and (g) of this paragraph, these CAIR NO_x Ozone Season allowances will be allocated on a pro rata basis to the Baseline CAIR NO_x Ozone Season units for the applicable control periods.~~

~~(i) Adjustment of Replacement CAIR NO_x Ozone Season Allowance Allocations. If the total number of calculated CAIR NO_x Ozone Season allowances allocated to all Replacement CAIR NO_x Ozone Season units under subparagraph (f) of this paragraph exceeds the number of CAIR NO_x Ozone Season allowances in the Retired Unit Allowance Pool, each unit's allocation will be further adjusted by multiplying by the ratio of the number of CAIR NO_x Ozone Season allowances in the Retired Unit Allowance Pool divided by the~~

~~total number of CAIR NO_x Ozone Season allowance allocations to all Replacement units under subparagraph (f) of this paragraph so that the number of CAIR NO_x Ozone Season allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted CAIR NO_x Ozone Season allowance allocations will be rounded to the nearest ton, as appropriate.~~

~~(j) Adjustment of New CAIR NO_x Ozone Season Allowance Allocations. If the total number of calculated CAIR NO_x Ozone Season allowances allocated to all New CAIR NO_x Ozone Season units under subparagraph (g) of this paragraph exceeds the number of CAIR NO_x Ozone Season allowances remaining in the Retired Unit Allowance Pool after allocation to Replacement CAIR NO_x Ozone Season units, each unit's allocation will be further adjusted by multiplying by the ratio of the number of CAIR NO_x Ozone Season allowances remaining in the Retired Unit Allowance Pool after allocation to Replacement CAIR NO_x Ozone Season units divided by the total number of CAIR NO_x Ozone Season allowance allocations to New CAIR NO_x Ozone Season units under subparagraph (g) of this paragraph so that the total number of CAIR NO_x Ozone Season allowances in the Retired Unit Allowance Pool is not exceeded. The adjusted CAIR NO_x Ozone Season allowance allocations will be rounded to the nearest ton, as appropriate.~~

~~(k) CAIR NO_x Ozone Season allowances allocated to Baseline CAIR NO_x Ozone Season units based on heat inputs determined in accordance with subparagraphs (b)1.(iv) of this paragraph will be held in the Department's general account until the unit commences operation, but no later than July 31 of the year for which the CAIR NO_x Ozone Season allowances are being allocated. If the unit does not commence operations, the CAIR NO_x Ozone Season allowances will be transferred by the Department pro rata to Baseline CAIR NO_x Ozone Season units that were allocated CAIR NO_x Ozone Season allowances in accordance with subparagraphs (b)1.(i), (ii), or (iii) of this paragraph. No later than July 31 of the year for which the allocation is being made, the Department shall notify the Administrator of the appropriate CAIR NO_x Ozone Season allowance transfers.~~

~~(l) CAIR NO_x Ozone Season allowances allocated to Replacement CAIR NO_x Ozone Season units based on heat inputs determined in accordance with subparagraphs (b)1.(v), (b)2.(iv), or (b)3.(iii) of this paragraph will be held in the Department's general account until the unit commences operation, but no later than July 31 of the year for which the CAIR NO_x Ozone Season allowances are being allocated. If the unit does not commence operations, the CAIR NO_x Ozone Season allowances will be transferred by the Department pro rata to Baseline CAIR NO_x Ozone Season units that were allocated CAIR NO_x Ozone Season allowances in accordance with subparagraphs (b)1.(i) through (iii), (b)2.(i) through (iii), or (b)3.(i) of this paragraph. No later than July 31 of the year for which the allowances were allocated, the Department shall notify the Administrator of the appropriate CAIR NO_x Ozone Season allowance transfers.~~

~~(m) CAIR NO_x Ozone Season allowances allocated to New CAIR NO_x Ozone Season units based on heat inputs determined in accordance with subparagraphs (b)1.(vi), (b)2.(vi), or (b)3.(iv) of this paragraph will be held in the~~

Department's general account until the unit commences operation, but no later than July 31 of the year for which the CAIR NO_x Ozone Season allowances are being allocated. If the unit does not commence operations, the CAIR NO_x Ozone Season allowances will be transferred by the Department pro rata to Baseline CAIR NO_x Ozone Season units that were allocated CAIR NO_x Ozone Season allowances in accordance with subparagraphs (b)1.(i) through (iii), (b)2.(i) through (iii), or (b)3.(i) of this paragraph. No later than July 31 of the year for which the allowances were allocated, the Department shall notify the Administrator of the appropriate CAIR NO_x Ozone Season allowance transfers.

(n) CAIR NO_x Ozone Season allowances will not be allocated to CAIR NO_x Ozone Season units that retire under 335-3-8-.25(5) prior to the date CAIR NO_x Ozone Season allowance allocations are submitted to the Administrator under subparagraphs (2)(a), (b), or (c) of this rule.

(o) The total CAIR NO_x Ozone Season allowances allocated for any control period in accordance with subparagraphs (3)(e), (f), and (g) of this paragraph shall not exceed the State Trading Program Budget as determined by the applicable, approved State Implementation Plan.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

335-3-8-.30 REPEAL ~~CAIR NO_x Ozone Season Allowance Tracking System.~~ Reserved.

~~(1) Reserved.~~

~~(2) Establishment of accounts.~~

~~(a) Compliance accounts. Except as provided in rule 335-3-8-.33(5)(e), upon receipt of a complete certificate of representation under rule 335-3-8-.26(4), the Administrator will establish a compliance account for the CAIR NO_x Ozone Season source for which the certificate of representation was submitted, unless the source already has a compliance account.~~

~~(b) General accounts.~~

~~1. Application for general account.~~

~~(i) Any person may apply to open a general account for the purpose of holding and transferring CAIR NO_x Ozone Season allowances. An application for a general account may designate one and only one CAIR authorized account representative and one and only one alternate CAIR authorized account representative who may act on behalf of the CAIR authorized account representative. The agreement by which the alternate CAIR authorized account representative is selected shall include a procedure for authorizing the alternate CAIR authorized account representative to act in lieu of the CAIR authorized account representative.~~

~~(ii) A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:~~

~~(I) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR authorized account representative and any alternate CAIR authorized account representative;~~

~~(II) Organization name and type of organization, if applicable;~~

~~(III) A list of all persons subject to a binding agreement for the CAIR authorized account representative and any alternate CAIR authorized account representative to represent their ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account;~~

~~(IV) The following certification statement by the CAIR authorized account representative and any alternate CAIR authorized account representative: "I certify that I was selected as the CAIR authorized account representative or the alternate CAIR authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Ozone Season Trading Program on behalf of such persons and that each such person shall be fully~~

~~bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account."~~

~~(V) The signature of the CAIR authorized account representative and any alternate CAIR authorized account representative and the dates signed.~~

~~(iii) Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.~~

~~2. Authorization of CAIR authorized account representative and alternate CAIR authorized account representative.~~

~~(i) Upon receipt by the Administrator of a complete application for a general account under subparagraph (b)1. of this paragraph:~~

~~(I) The Administrator will establish a general account for the person or persons for whom the application is submitted.~~

~~(II) The CAIR authorized account representative and any alternate CAIR authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the general account in all matters pertaining to the CAIR NO_x Ozone Season Trading Program, notwithstanding any agreement between the CAIR authorized account representative or any alternate CAIR authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CAIR authorized account representative or any alternate CAIR authorized account representative by the Administrator or a court regarding the general account.~~

~~(III) Any representation, action, inaction, or submission by any alternate CAIR authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CAIR authorized account representative.~~

~~(ii) Each submission concerning the general account shall be submitted, signed, and certified by the CAIR authorized account representative or any alternate CAIR authorized account representative for the persons having an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the general account. Each such submission shall include the following certification statement by the CAIR authorized account representative or any alternate CAIR authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document~~

and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(iii) The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with subparagraph (b)2.(ii) of this paragraph.

3. Changing CAIR authorized account representative and alternate CAIR authorized account representative; changes in persons with ownership interest.

(i) The CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_X Ozone Season allowances in the general account.

(ii) The alternate CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under subparagraph (b)1. of this paragraph. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_X Ozone Season allowances in the general account.

(iii) In the event a person having an ownership interest with respect to CAIR NO_X Ozone Season allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the CAIR authorized account representative and any alternate CAIR authorized account representative of the account, and the decisions and orders of the Administrator or a court, as if the person were included in such list.

(I) Within 30 days following any change in the persons having an ownership interest with respect to CAIR NO_X Ozone Season allowances in the general account, including the addition of a new person, the CAIR authorized account representative or any alternate CAIR authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the

CAIR NO_x Ozone Season allowances in the general account to include the change.

4. Objections concerning CAIR authorized account representative or alternate CAIR authorized account representative.

(i) Once a complete application for a general account under subparagraph (b)1. of this paragraph has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under subparagraph (b)1. of this paragraph is received by the Administrator.

(ii) Except as provided in subparagraph (b)3.(i) or (ii) of this paragraph, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account shall affect any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative or the finality of any decision or order by the Administrator under the CAIR NO_x Ozone Season Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account, including private legal disputes concerning the proceeds of CAIR NO_x Ozone Season allowance transfers.

5. Delegation by CAIR authorized account representative and alternate CAIR authorized account representative.

(i) A CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under rules 335-3-8-.30 and 338-3-8-.31.

(ii) An alternate CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under rules 335-3-8-.30 and338-3-8-.31.

(iii) In order to delegate authority to make an electronic submission to the Administrator in accordance with subparagraph (b)5.(i) or (ii) of this paragraph, the CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(I) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR authorized account representative or alternate CAIR authorized account representative;

(II) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an "agent");

(III) For each such natural person, a list of the type or types of electronic submissions under subparagraph (b)5.(i) or (ii) of this paragraph for which authority is delegated to him or her;

(IV) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: "I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR authorized account representative or alternate CAIR authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 96.351(b)(5)(iv) shall be deemed to be an electronic submission by me."; and

(V) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 96.351(b)(5)(iv), I agree to maintain an email account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 96.351(b)(5) is terminated."

(iv) A notice of delegation submitted under subparagraph (b)5.(iii) of this paragraph shall be effective, with regard to the CAIR authorized account representative or alternate CAIR authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in subparagraph (b)5.(iii)(IV) of this paragraph and made in accordance with a notice of delegation effective under subparagraph (b)5.(iv) of this paragraph shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

(c) Account identification. The Administrator will assign a unique identifying number to each account established under subparagraph (a) or (b) of this paragraph.

(3) Responsibilities of CAIR authorized account representative. Following the establishment of a CAIR NO_x Ozone Season Allowance Tracking System account, all submissions to the Administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CAIR NO_x Ozone Season allowances in the account, shall be made only by the CAIR authorized account representative for the account.

(4) Recordation of CAIR NO_x Ozone Season allowance allocations.

(a) By September 30, 2007, the Administrator will record in the CAIR NO_x Ozone Season source's compliance account the CAIR NO_x Ozone Season allowances allocated for the CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with rule 335-3-8-.29(2)(a), for the control periods in 2009, 2010, and 2011.

(b) By December 1, 2008 and December 1 of every third year thereafter, the Administrator will record in the source's compliance account the CAIR NO_x Ozone Season allowances allocated for the CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with rule 335-3-8-.29(2)(b) and (c), for the control periods in the three years after the last year for which NO_x Ozone Season allowances were previously recorded.

(c) By September 1, 2009 and September 1 of every year thereafter, the Administrator will record in the source's compliance account the CAIR NO_x Ozone Season allowances allocated for the CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with rule 335-3-8-.29(1) and (m), for the control period in the year of the applicable deadline for recordation under this subparagraph.

(d) Serial numbers for allocated CAIR NO_x Ozone Season allowances. When recording the allocation of CAIR NO_x Ozone Season allowances for a CAIR NO_x Ozone Season unit in a compliance account, the Administrator will assign each CAIR NO_x Ozone Season allowance a unique identification number that will include digits identifying the year of the control period for which the CAIR NO_x Ozone Season allowance is allocated.

(5) Compliance with CAIR NO_x emissions limitation.

(a) Allowance transfer deadline. The CAIR NO_x Ozone Season allowances are available to be deducted for compliance with a source's CAIR NO_x Ozone Season emissions limitation for a control period in a given calendar year only if the CAIR NO_x Ozone Season allowances:

1. Were allocated for the control period in the year or a prior year; and

2. Are held in the compliance account as of the allowance transfer deadline for the control period or are transferred into the compliance account by a CAIR NO_x Ozone Season allowance transfer correctly submitted for recordation under rule 335-3-8-.31(1) and (2) by the allowance transfer deadline for the control period.

(b) Deductions for compliance.

1. Following the recordation, in accordance with rule 335-3-8-.31(2), of CAIR NO_x Ozone Season allowance transfers submitted for recordation in a source's compliance account by the allowance transfer deadline for a control period, the Administrator will deduct from the compliance account CAIR NO_x Ozone Season allowances available under subparagraph (a) of this paragraph in order to determine whether the source meets the CAIR NO_x Ozone Season emissions limitation for the control period, as follows:

(i) Until the amount of CAIR NO_x Ozone Season allowances deducted equals the number of tons of total nitrogen oxides emissions, determined in accordance with rule 335-3-8-.32, from all CAIR NO_x Ozone Season units at the source for the control period; or

(ii) If there are insufficient CAIR NO_x Ozone Season allowances to complete the deductions in subparagraph (b)1.(i) of this paragraph, until no more CAIR NO_x Ozone Season allowances available under subparagraph (a) of this paragraph remain in the compliance account.

(c) Identification of CAIR NO_x Ozone Season allowances by serial number.

1. The CAIR authorized account representative for a source's compliance account may request that specific CAIR NO_x Ozone Season allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with subparagraph (b) or (d) of this paragraph. Such request shall be submitted to the Administrator by the allowance transfer deadline for the control period and include, in a format prescribed by the Administrator, the identification of the CAIR NO_x Ozone Season source and the appropriate serial numbers.

2. First in, first-out. The Administrator will deduct CAIR NO_x Ozone Season allowances under subparagraph (b) or (d) of this paragraph from the source's compliance account, in the absence of an identification or in the case of a partial identification of CAIR NO_x Ozone Season allowances by serial number under subparagraph (c)1. of this paragraph, on a first-in, first-out (FIFO) accounting basis in the following order:

(i) Any CAIR NO_x Ozone Season allowances that were allocated to the units at the source, in the order of recordation; and then

(ii) Any CAIR NO_x Ozone Season allowances that were allocated to any entity and transferred and recorded in the compliance account pursuant to rule 335-3-8-.31, in the order of recordation.

(d) Deductions for excess emissions.

1. After making the deductions for compliance under subparagraph (b) of this paragraph for a control period in a calendar year in which the CAIR NO_x

~~Ozone Season source has excess emissions, the Administrator will deduct from the source's compliance account an amount of CAIR NO_X Ozone Season allowances, allocated for the control period in the immediately following calendar year, equal to 3 times the number of tons of the source's excess emissions.~~

~~2. Any allowance deduction required under subparagraph (d)1. of this paragraph shall not affect the liability of the owners and operators of the CAIR NO_X Ozone Season source or the CAIR NO_X Ozone Season units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violations, as ordered under the Clean Air Act or applicable State law.~~

~~(e) Recordation of deductions. The Administrator will record in the appropriate compliance account all deductions from such an account under subparagraph (b) and (d) of this paragraph and rule 335-3-8-.33.~~

~~(f) Administrator's action on submissions.~~

~~1. The Administrator may review and conduct independent audits concerning any submission under the CAIR NO_X Ozone Season Trading Program and make appropriate adjustments of the information in the submissions.~~

~~2. The Administrator may deduct CAIR NO_X Ozone Season allowances from or transfer CAIR NO_X Ozone Season allowances to a source's compliance account based on the information in the submissions, as adjusted under subparagraph (f)1. of this paragraph, and record such deductions and transfers.~~

~~(6) Banking.~~

~~(a) CAIR NO_X Ozone Season allowances may be banked for future use or transfer in a compliance account or a general account in accordance with subparagraph (b) of this paragraph.~~

~~(b) Any CAIR NO_X Ozone Season allowance that is held in a compliance account or a general account will remain in such account unless and until the CAIR NO_X Ozone Season allowance is deducted or transferred under paragraphs (5) or (7) of this rule, or rule 335-3-8-.31 or 335-3-8-.33.~~

~~(7) Account error. The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any CAIR NO_X Ozone Season Allowance Tracking System account. Within 10 business days of making such correction, the Administrator will notify the CAIR authorized account representative for the account.~~

~~(8) Closing of general accounts.~~

~~(a) The CAIR authorized account representative of a general account may submit to the Administrator a request to close the account, which shall~~

include a correctly submitted allowance transfer under rule 335-3-8-.31(1) and (2) for any CAIR NO_x Ozone Season allowances in the account to one or more other CAIR NO_x Ozone Season Allowance Tracking System accounts.

(b) If a general account has no allowance transfers in or out of the account for a 12-month period or longer and does not contain any CAIR NO_x Ozone Season allowances, the Administrator may notify the CAIR authorized account representative for the account that the account will be closed following 20 business days after the notice is sent. The account will be closed after the 20-day period unless, before the end of the 20-day period, the Administrator receives a correctly submitted transfer of CAIR NO_x Ozone Season allowances into the account under rule 335-3-8-.31(1) and (2) or a statement submitted by the CAIR authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.31 REPEAL ~~CAIR NO_x Ozone Season Allowance Transfers.~~ Reserved.

~~(1) Submission of CAIR NO_x Ozone Season allowance transfers. A CAIR authorized account representative seeking recordation of a CAIR NO_x Ozone Season allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the CAIR NO_x Ozone Season allowance transfer shall include the following elements, in a format specified by the Administrator:~~

~~(a) The account numbers for both the transferor and transferee accounts;~~

~~(b) The serial number of each CAIR NO_x Ozone Season allowance that is in the transferor account and is to be transferred; and~~

~~(c) The name and signature of the CAIR authorized account representative of the transferor account and the date signed.~~

~~(2) EPA recordation.~~

~~(a) Within 5 business days (except as provided in subparagraph (b) of this paragraph) of receiving a CAIR NO_x Ozone Season allowance transfer, the Administrator will record a CAIR NO_x Ozone Season allowance transfer by moving each CAIR NO_x Ozone Season allowance from the transferor account to the transferee account as specified by the request, provided that:~~

~~1. The transfer is correctly submitted under paragraph (1) of this rule; and~~

~~2. The transferor account includes each CAIR NO_x Ozone Season allowance identified by serial number in the transfer.~~

~~(b) A CAIR NO_x Ozone Season allowance transfer that is submitted for recordation after the allowance transfer deadline for a control period and that includes any CAIR NO_x Ozone Season allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions under rule 335-3-8-.30(5) for the control period immediately before such allowance transfer deadline.~~

~~(c) Where a CAIR NO_x Ozone Season allowance transfer submitted for recordation fails to meet the requirements of subparagraph (a) of this paragraph, the Administrator will not record such transfer.~~

~~(3) Notification.~~

~~(a) Notification of recordation. Within 5 business days of recordation of a CAIR NO_x Ozone Season allowance transfer under paragraph (2) of this rule, the Administrator will notify the CAIR authorized account representatives of both the transferor and transferee accounts.~~

(b) Notification of non-recordation. Within 10 business days of receipt of a CAIR NO_x Ozone Season allowance transfer that fails to meet the requirements of subparagraph (2)(a) of this rule, the Administrator will notify the CAIR authorized account representatives of both accounts subject to the transfer of:

1. A decision not to record the transfer, and

2. The reasons for such non-recordation.

(c) Nothing in this section shall preclude the submission of a CAIR NO_x Ozone Season allowance transfer for recordation following notification of non-recordation.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended:

335-3-8-.32 REPEAL ~~CAIR NO_x Ozone Season Monitoring and Reporting~~.Reserved.

~~(1) General Requirements. The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NO_x Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H. For purposes of complying with such requirements, the definitions in rule 335-3-8-.25(2) and in 40 CFR § 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR 75 shall be deemed to refer to the terms "CAIR NO_x Ozone Season unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in rule 335-3-8-.25(2). The owner or operator of a unit that is not a CAIR NO_x Ozone Season unit but that is monitored under 40 CFR § 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NO_x Ozone Season unit.~~

~~(a) Requirements for installation, certification, and data accounting. The owner or operator of each CAIR NO_x Ozone Season unit shall:~~

~~1. Install all monitoring systems required under this rule for monitoring NO_x mass emissions and individual unit heat input [including all systems required to monitor NO_x emission rate, NO_x concentration, stack gas moisture content, stack gas flow rate, CO_2 or O_2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR §§ 75.71 and 75.72];~~

~~2. Successfully complete all certification tests required under paragraph (2) of this rule and meet all other requirements of this rule and 40 CFR 75 applicable to the monitoring systems under subparagraph (a)1. of this paragraph; and~~

~~3. Record, report, and quality-assure the data from the monitoring systems under subparagraph (a)1. of this paragraph.~~

~~(b) Compliance deadlines. Except as provided in subparagraph (e) of this paragraph, the owner or operator shall meet the monitoring system certification and other requirements of subparagraphs (a)1. and 2. of this paragraph on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under subparagraph (a)1. of this paragraph on and after the following dates.~~

~~1. For the owner or operator of a CAIR NO_x Ozone Season unit that commences commercial operation before July 1, 2007, by May 1, 2008.~~

~~2. For the owner or operator of a CAIR NO_x Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on an annual basis under subparagraph (5)(d) of this rule, by the later of the following dates:~~

(i) 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

(ii) May 1, 2008.

3. For the owner or operator of a CAIR NO_X Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on a control period basis under subparagraph (5)(d)2.(ii), by the later of the following dates:

(i) 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

(ii) If the compliance date under subparagraph (b)3.(i) of this paragraph is not during a control period, May 1 immediately following the compliance date under subparagraph (b)3.(i) of this paragraph.

4. For the owner or operator of a CAIR NO_X Ozone Season unit for which construction of a new stack or flue or installation of add-on NO_X emission controls is completed after the applicable deadline under subparagraphs (b)1., 2., 6., or 7. of this paragraph and that reports on an annual basis under subparagraph (5)(d) of this rule, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_X emissions controls.

5. For the owner or operator of a CAIR NO_X Ozone Season unit for which construction of a new stack or flue or installation of add-on NO_X emission controls is completed after the applicable deadline under subparagraphs (b)1., 3., 6., or 7. of this paragraph and that reports on a control period basis under subparagraph (5)(d)2.(ii), by the later of the following dates:

(i) 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_X emissions controls; or

(ii) If the compliance date under subparagraph (b)5.(i) of this paragraph is not during a control period, May 1 immediately following the compliance date under subparagraph (b)5.(i) of this paragraph.

6. Notwithstanding the dates in subparagraphs (b)1., 2., and 3. of this paragraph, for the owner or operator of a unit for which a CAIR NO_X Ozone Season opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.33, by the date specified in rule 335-3-8-.33(5)(b).

7. Notwithstanding the dates in subparagraphs (b)1., 2., and 3. of this paragraph, for the owner or operator of a CAIR NO_X Ozone Season opt-in unit under rule 335-3-8-.33, by the date on which the CAIR NO_X Ozone Season opt-in unit enters the CAIR NO_X Ozone Season Trading Program as provided in rule 335-3-8-.33(5)(g).

(c) Reporting data. The owner or operator of a CAIR NO_X Ozone Season unit that does not meet the applicable compliance date set forth in paragraph (b) of this paragraph for any monitoring system under subparagraph (c)1. of this paragraph shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO_X concentration, NO_X emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO_X mass emissions and heat input in accordance with 40 CFR § 75.31(b)(2) or (c)(3), section 2.4 of Appendix D to 40 CFR 75, or section 2.5 of Appendix E to 40 CFR 75, as applicable.

(d) Prohibitions.

1. No owner or operator of a CAIR NO_X Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this rule without having obtained prior written approval in accordance with paragraph (6) of this rule.

2. No owner or operator of a CAIR NO_X Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NO_X emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and 40 CFR 75.

3. No owner or operator of a CAIR NO_X Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_X mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule and 40 CFR 75.

4. No owner or operator of a CAIR NO_X Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this rule, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under rule 335-3-8-.25(5) that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this rule and 40 CFR 75, by the Department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with subparagraph (2)(d)3.(i).

(e) Long term cold storage. The owner or operator of a CAIR NO_x Ozone Season unit is subject to the applicable provisions of 40 CFR 75 concerning units in long term cold storage.

(2) Initial certification and recertification procedures.

(a) The owner or operator of a CAIR NO_x Ozone Season unit shall be exempt from the initial certification requirements of this paragraph for a monitoring system under subparagraph (1)(a)1. of this rule if the following conditions are met:

1. The monitoring system has been previously certified in accordance with 40 CFR 75; and

2. The applicable quality assurance and quality control requirements of 40 CFR § 75.21 and Appendix B, Appendix D, and Appendix E to 40 CFR 75 are fully met for the certified monitoring system described in subparagraph (a)1. of this paragraph.

(b) The recertification provisions of this paragraph shall apply to a monitoring system under subparagraph (1)(a)1. of this rule exempt from initial certification requirements under subparagraph (a) of this paragraph.

(c) If the Administrator has previously approved a petition under 40 CFR § 75.17(a) or (b) for apportioning the NO_x emission rate measured in a common stack or a petition under 40 CFR § 75.66 for an alternative to a requirement in 40 CFR § 75.12 or 40 CFR § 75.17, the CAIR designated representative shall resubmit the petition to the Administrator under subparagraph (6)(a) of this rule to determine whether the approval applies under the CAIR NO_x Ozone Season Trading Program.

(d) Except as provided in subparagraph (a) of this paragraph, the owner or operator of a CAIR NO_x Ozone Season unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (i.e., a continuous emission monitoring system and an excepted monitoring system under appendices D and E to 40 CFR 75) under subparagraph (1)(a)1. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR § 75.19 or that qualifies to use an alternative monitoring system under Subpart E of 40 CFR 75 shall comply with the procedures in subparagraph (e) or (f) of this paragraph respectively.

1. Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under subparagraph (1)(a)1. of this rule (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR § 75.20 by the applicable deadline in subparagraph (1)(b) of this rule. In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this rule in a location where no such monitoring system

was previously installed, initial certification in accordance with 40 CFR § 75.20 is required.

2. Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under subparagraph (1)(a)1. of this rule that may significantly affect the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR § 75.21 or 40 CFR 75, Appendix B, the owner or operator shall recertify the monitoring system in accordance with 40 CFR § 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR § 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter systems, and any excepted NO_x monitoring system under 40 CFR 75, Appendix E, under subparagraph (1)(a)1. of this rule are subject to the recertification requirements in 40 CFR § 75.20(g)(6).

3. Approval process for initial certification and recertification. Subparagraphs (d)3.(i) through (iv) of this paragraph apply to both initial certification and recertification of a continuous monitoring system under subparagraph (1)(a)1. of this rule. For recertifications, replace the words "certification" and "initial certification" with the word "recertification", replace the word "certified" with the word "recertified," and follow the procedures in 40 CFR §§ 75.20(b)(5) and (g)(7) in lieu of the procedures in subparagraph (d)3.(v) of this paragraph.

(i) Notification of certification. The CAIR designated representative shall submit to the Department, the appropriate EPA Regional Office, and the Administrator written notice of the dates of certification testing, in accordance with paragraph (4) of this rule.

(ii) Certification application. The CAIR designated representative shall submit to the Department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR § 75.63.

(iii) Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR § 75.20(a)(3). A provisionally certified monitoring system may be used under the CAIR NO_x Ozone Season Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system under subparagraph (d)3.(ii) of this paragraph. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR 75, will be

~~considered valid quality assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Department.~~

~~(iv) Certification application approval process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under subparagraph (d)3.(ii) of this paragraph. In the event the Department does not issue such a notice within such 120 day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75 and is included in the certification application will be deemed certified for use under the CAIR NO_x Ozone Season Trading Program.~~

~~(I) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.~~

~~(II) Incomplete application notice. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the CAIR designated representative must submit the additional information required to complete the certification application. If the CAIR designated representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under subparagraph (d)3.(iv)(III) of this paragraph. The 120 day review period shall not begin before receipt of a complete certification application.~~

~~(III) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR 75 or if the certification application is incomplete and the requirement for disapproval under subparagraph (d)3.(iv)(II) of this paragraph is met, then the Department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality assured data beginning with the date and hour of provisional certification [as defined under 40 CFR § 75.20(a)(3)]. The owner or operator shall follow the procedures for loss of certification in subparagraph (d)3.(v) of this paragraph for each monitoring system that is disapproved for initial certification.~~

~~(IV) Audit decertification. The Department or, for a CAIR NO_x Ozone Season opt-in unit or a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.33, the Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with subparagraph (3)(b) of this rule.~~

(v) Procedures for loss of certification. If the Department or the Administrator issues a notice of disapproval of a certification application under subparagraph (d)3.(iv)(III) of this paragraph or a notice of disapproval of certification status under subparagraph (d)3.(iv)(IV) of this paragraph, then:

(I) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR § 75.20(a)(4)(iii), 40 CFR § 75.20(g)(7), or 40 CFR § 75.21(e) and continuing until the applicable date and hour specified under 40 CFR § 75.20(a)(5)(i) or (g)(7):

I. For a disapproved NO_x emission rate (i.e., NO_x diluent) system, the maximum potential NO_x emission rate, as defined in 40 CFR § 72.2.

II. For a disapproved NO_x pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO_x and the maximum potential flow rate, as defined in Sections 2.1.2.1 and 2.1.4.1 of 40 CFR 75, Appendix A.

III. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO_2 concentration or the minimum potential O_2 concentration (as applicable), as defined in Sections 2.1.5, 2.1.3.1, and 2.1.3.2 of 40 CFR 75, Appendix A.

IV. For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in Section 2.4.2.1 of 40 CFR 75, Appendix D.

V. For a disapproved excepted NO_x monitoring system under 40 CFR 75, Appendix E, the fuel-specific maximum potential NO_x emission rate, as defined in 40 CFR § 72.2.

(II) The CAIR designated representative shall submit a notification of certification retest dates and a new certification application in accordance with subparagraphs (d)3.(i) and (ii) of this paragraph.

(III) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's or the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) Initial certification and recertification procedures for units using the low mass emission excepted methodology under 40 CFR § 75.19. The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under 40 CFR § 75.19 shall meet the applicable certification and recertification requirements in 40 CFR §§ 75.19(a)(2) and 75.20(h). If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in 40 CFR § 75.20(g).

(f) Certification/recertification procedures for alternative monitoring systems. The CAIR designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under 40 CFR 75, Subpart E shall comply with the applicable notification and application procedures of 40 CFR § 75.20(f).

(3) Out of control periods.

(a) Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or Appendix D or Appendix E to, 40 CFR 75.

(b) Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under paragraph (2) of this rule or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department or, for a CAIR NO_x Ozone Season opt in unit or a unit for which a CAIR opt in permit application is submitted and not withdrawn and a CAIR opt in permit is not yet issued or denied under rule 335 3 8 .33, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. By issuing the notice of disapproval, the Department or the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in paragraph (2) of this rule for each disapproved monitoring system.

(4) Notifications. The CAIR designated representative for a CAIR NO_x Ozone Season unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR § 75.61.

(5) Recordkeeping and reporting.

(a) General provisions. The CAIR designated representative shall comply with all recordkeeping and reporting requirements in this paragraph, the applicable recordkeeping and reporting requirements under 40 CFR § 75.73, and the requirements of rule 335 3 8 .26(1)(e).

(b) Monitoring Plans. The owner or operator of a CAIR NO_x Ozone Season unit shall comply with requirements of 40 CFR § 75.73(c) and (e) and,

for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.33 and rules 335-3-8-.33(4) and (5)(a).

(c) Certification Applications. The CAIR designated representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under paragraph (2) of this rule, including the information required under 40 CFR § 75.63.

(d) Quarterly reports. The CAIR designated representative shall submit quarterly reports, as follows:

1. If the CAIR NO_x Ozone Season unit is subject to an Acid Rain emissions limitation or a CAIR NO_x emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this rule, the CAIR designated representative shall meet the requirements of 40 CFR 75, Subpart H (concerning monitoring of NO_x mass emissions) for such unit for the entire year and shall report the NO_x mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008;

(ii) For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subparagraph (1)(b) of this rule, unless that quarter is the third or fourth quarter of 2007 or the first quarter of 2008, in which case reporting shall commence in the quarter covering May 1, 2008 through June 30, 2008;

(iii) Notwithstanding subparagraphs (d)1.(i) and (ii) of this paragraph, for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under rule 335-3-8-.33, the calendar quarter corresponding to the date specified in rule 335-3-8-.33(5)(b); and

(iv) Notwithstanding subparagraphs (d)1.(i) and (ii) of this paragraph, for a CAIR NO_x Ozone Season opt-in unit under rule 335-3-8-.33, the calendar quarter corresponding to the date on which the CAIR NO_x Ozone Season opt-in unit enters the CAIR NO_x Ozone Season Trading Program as provided in rule 335-3-8-.33(5)(g).

2. If the CAIR NO_x Ozone Season unit is not subject to an Acid Rain emissions limitation or a CAIR NO_x emissions limitation, then the CAIR designated representative shall either:

(i) Meet the requirements of 40 CFR 75, Subpart H (concerning monitoring of NO_x mass emissions) for such unit for the entire year and report the NO_x mass emissions data and heat input data for such unit in accordance with subparagraph (d)1., of this paragraph; or

(ii) Meet the requirements of 40 CFR 75, Subpart H for the control period [including the requirements in 40 CFR § 75.74(c)] and report NO_X mass emissions data and heat input data [including the data described in 40 CFR § 75.74(c)(6)] for such unit only for the control period of each year and report, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(I) For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008;

(II) For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subparagraph (1)(b), unless that date is not during a control period, in which case reporting shall commence in the quarter that includes May 1 through June 30 of the first control period after such date;

(III) Notwithstanding subparagraphs (d)2.(ii)(I) and 2.(ii)(II) of this paragraph, for a unit for which a CAIR opt in permit application is submitted and not withdrawn and a CAIR opt in permit is not yet issued or denied under rule 335-3-8-.33, the calendar quarter corresponding to the date specified in rule 335-3-8-.33(5)(b); and

(IV) Notwithstanding subparagraphs (d)2.(ii)(I) and 2.(ii)(II) of this paragraph, for a CAIR NO_X Ozone Season opt in unit under rule 335-3-8-.33, the calendar quarter corresponding to the date on which the CAIR NO_X Ozone Season opt in unit enters the CAIR NO_X Ozone Season Trading Program as provided in rule 335-3-8-.33(5)(g).

3. The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR § 75.73(f).

4. For CAIR NO_X Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR 75 as applicable, in addition to the NO_X mass emission data, heat input data, and other information required by this rule.

(c) Compliance certification. The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

1. The monitoring data submitted were recorded in accordance with the applicable requirements of this rule and 40 CFR 75, including the quality assurance procedures and specifications;

2. For a unit with add-on NO_x emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR § 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under 40 CFR 75, Appendix B and the substitute data values do not systematically underestimate NO_x emissions; and

3. For a unit that is reporting on a control period basis under subparagraph (d)2.(ii) of this paragraph, the NO_x emission rate and NO_x concentration values substituted for missing data under 40 CFR 75, Subpart D are calculated using only values from a control period and do not systematically underestimate NO_x emissions.

(6) Petitions.

(a) Except as provided in subparagraph (b)2. of this paragraph, the CAIR designated representative of a CAIR NO_x Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Administrator requesting approval to apply an alternative to any requirement of this rule. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent that the petition is approved in writing by the Administrator, in consultation with the Department.

(b) The CAIR designated representative of a CAIR NO_x Ozone Season unit that is not subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Department and the Administrator requesting approval to apply an alternative to any requirement of this rule. Application of an alternative to any requirement of this rule is in accordance with this rule only to the extent that the petition is approved in writing by both the Department and the Administrator.

1. The CAIR designated representative of a CAIR NO_x Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR § 75.66 to the Department and the Administrator requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR § 75.72. Application of an alternative to any such requirement is in accordance with this rule only to the extent that the petition is approved in writing by both the Department and the Administrator.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-28-14, 22-28-19, and 22-28-20.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007; March 31, 2009.

335-3-8-.33 REPEAL ~~CAIR NO_x Ozone Season Opt-in Units~~.Reserved.

~~(1) Applicability. A CAIR NO_x Ozone Season opt-in unit must be a unit that:~~

~~(a) Is located in the State;~~

~~(b) Is not a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) and is not covered by a retired unit exemption under rule 335-3-8-.25(5) that is in effect;~~

~~(c) Is not covered by a retired unit exemption under 40 CFR § 72.8 that is in effect;~~

~~(d) Has or is required or qualified to have a Title V operating permit or other federally enforceable permit; and~~

~~(e) Vents all of its emissions to a stack and can meet the monitoring, recordkeeping, and reporting requirements of rule 335-3-8-.32.~~

~~(2) General.~~

~~(a) Except as otherwise provided in rules 335-3-8-.25(1) through (4), (6)and (7), and rule 335-3-8-.26 and 335-3-8-.27 and 335-3-8-.30 through 335-3-8-.32, a CAIR NO_x Ozone Season opt in unit shall be treated as a CAIR NO_x Ozone Season unit for purposes of applying rules 335-3-8-.25 through 335-3-8-.27 and 335-3-8-.30 through 335-3-8-.32.~~

~~(b) Solely for purposes of applying, as provided in this rule, the requirements of rule 335-3-8-.32 to a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under this rule, such unit shall be treated as a CAIR NO_x Ozone Season unit before issuance of a CAIR opt-in permit for such unit.~~

~~(3) CAIR designated representative. Any CAIR NO_x Ozone Season opt-in unit, and any unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under this rule, located at the same source as one or more CAIR NO_x Ozone Season units shall have the same CAIR designated representative and alternate CAIR designated representative as such CAIR NO_x Ozone Season units.~~

~~(4) Applying for CAIR opt-in permit.~~

~~(a) Applying for initial CAIR opt-in permit. The CAIR designated representative of a unit meeting the requirements for a CAIR NO_x Ozone Season opt-in unit in paragraph (1) of this rule may apply for an initial CAIR opt-in permit at any time, except as provided under subparagraphs (7)(f) and (g) of this rule, and, in order to apply, must submit the following:~~

~~1. A complete CAIR permit application under rule 335-3-8-.27(3);~~

2. A certification, in a format specified by the Department, that the unit:

(i) Is not a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) and is not covered by a retired unit exemption under rule 335-3-8-.25(5) that is in effect;

(ii) Is not covered by a retired unit exemption under 40 CFR § 72.8 that is in effect;

(iii) Vents all of its emissions to a stack; and

(iv) Has documented heat input for more than 876 hours during the 6 months immediately preceding submission of the CAIR permit application under rule 335-3-8-.27(3);

3. A monitoring plan in accordance with rule 335-3-8-.32;

4. A complete certificate of representation under rule 335-3-8-.26(4) consistent with paragraph (3) of this rule, if no CAIR designated representative has been previously designated for the source that includes the unit; and

5. A statement, in a format specified by the Department, whether the CAIR designated representative requests that the unit be allocated CAIR NO_x Ozone Season allowances under subparagraph (9)(b) or (c) of this rule [subject to the conditions in subparagraphs(5)(h) and (7)(g)]. If allocation under subparagraph (9)(c) of this rule is requested, this statement shall include a statement that the owners and operators of the unit intend to repower the unit before January 1, 2015 and that they will provide, upon request, documentation demonstrating such intent.

(b) Duty to reapply.

1. The CAIR designated representative of a CAIR NO_x Ozone Season opt-in unit shall submit a complete CAIR permit application under rule 335-3-8-.27(3) to renew the CAIR opt-in unit permit in accordance with rule 335-3-8-.27(2)(b).

2. Unless the Department issues a notification of acceptance of withdrawal of the CAIR NO_x Ozone Season opt-in unit from the CAIR NO_x Ozone Season Trading Program in accordance with rule 335-3-8-.24(7) or the unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), the CAIR NO_x Ozone Season opt-in unit shall remain subject to the requirements for a CAIR NO_x Ozone Season opt-in unit, even if the CAIR designated representative for the CAIR NO_x opt-in unit fails to submit a CAIR permit application that is required for renewal of the CAIR opt-in permit under subparagraph (b)1. of this paragraph.

(5) Opt-in process. The Department will issue or deny a CAIR opt-in permit for a unit for which an initial application for a CAIR opt-in permit under paragraph (4) of this rule is submitted in accordance with the following:

(a) Interim review of monitoring plan. The Department and the Administrator will determine, on an interim basis, the sufficiency of the monitoring plan accompanying the initial application for a CAIR opt-in permit under paragraph (4) of this rule. A monitoring plan is sufficient, for purposes of interim review, if the plan appears to contain information demonstrating that the NO_X emissions rate and heat input of the unit and all other applicable parameters are monitored and reported in accordance with rule 335-3-8-.32. A determination of sufficiency shall not be construed as acceptance or approval of the monitoring plan.

(b) Monitoring and reporting.

1. If the Department and the Administrator determine that the monitoring plan is sufficient under subparagraph (a) of this paragraph, the owner or operator shall monitor and report the NO_X emissions rate and the heat input of the unit and all other applicable parameters, in accordance with rule 335-3-8-.32, starting on the date of certification of the appropriate monitoring systems under rule 335-3-8-.32 and continuing until a CAIR opt-in permit is denied under subparagraph(5)(f) of this rule or, if a CAIR opt-in permit is issued, the date and time when the unit is withdrawn from the CAIR NO_X Ozone Season Trading Program in accordance with paragraph (7) of this rule.

(i) The monitoring and reporting under subparagraph (b)1. of this paragraph shall include the entire control period immediately before the date on which the unit enters the CAIR NO_X Ozone Season Trading Program under paragraph (5)(g)of this rule, during which period monitoring system availability must not be less than 90 percent under rule 335-3-8-.32 and the unit must be in full compliance with any applicable State or Federal emissions or emissions-related requirements.

2. To the extent the NO_X emissions rate and the heat input of the unit are monitored and reported in accordance with rule 335-3-8-.32 for one or more control periods, in addition to the control period under subparagraph (b)1.(i) of this paragraph, during which control periods monitoring system availability is not less than 90 percent under rule 335-3-8-.32 and the unit is in full compliance with any applicable State or Federal emissions or emissions-related requirements and which control periods begin not more than 3 years before the unit enters the CAIR NO_X Ozone Season Trading Program under paragraph (5)(g) of this rule, such information shall be used as provided in subparagraphs (c) and (d) of this paragraph.

(c) Baseline heat input. The unit's baseline heat input shall equal:

1. If the unit's NO_X emissions rate and heat input are monitored and reported for only one control period, in accordance with subparagraph (b)1. of this paragraph, the unit's total heat input (in mmBtu) for the control period; or

2. If the unit's NO_X emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs

(b)1. and 2. of this paragraph, the average of the amounts of the unit's total heat input (in mmBtu) for the control periods under subparagraphs (b)1.(i) and (b)2. of this paragraph.

(d) Baseline NO_x emission rate. The unit's baseline NO_x emission rate shall equal:

1. If the unit's NO_x emissions rate and heat input are monitored and reported for only one control period, in accordance with subparagraph (b)1. of this paragraph, the unit's NO_x emissions rate (in lb/mmBtu) for the control period;

2. If the unit's NO_x emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs (b)1. and 2. of this paragraph, and the unit does not have add-on NO_x emission controls during any such control periods, the average of the amounts of the unit's NO_x emissions rate (in lb/mmBtu) for the control periods under subparagraphs (b)1.(i) and (b)2. of this paragraph; or

3. If the unit's NO_x emissions rate and heat input are monitored and reported for more than one control period, in accordance with subparagraphs (b)1. and 2. of this paragraph, and the unit has add-on NO_x emission controls during any such control periods, the average of the amounts of the unit's NO_x emissions rate (in lb/mmBtu) for such control periods during which the unit has add-on NO_x emission controls.

(e) Issuance of CAIR opt-in permit. After calculating the baseline heat input and the baseline NO_x emissions rate for the unit under subparagraphs (c) and (d) of this paragraph and if the Department determines that the CAIR designated representative shows that the unit meets the requirements for a CAIR NO_x Ozone Season opt-in unit in paragraph (1) of this rule and meets the elements certified in subparagraph (4)(a)2. of this rule, the Department will issue a CAIR opt-in permit. The Department will provide a copy of the CAIR opt-in permit to the Administrator, who will then establish a compliance account for the source that includes the CAIR NO_x Ozone Season opt-in unit unless the source already has a compliance account.

(f) Issuance of denial of CAIR opt-in permit. Notwithstanding subparagraphs (a) through (e) of this paragraph, if at any time before issuance of a CAIR opt-in permit for the unit, the Department determines that the CAIR designated representative fails to show that the unit meets the requirements for a CAIR NO_x Ozone Season opt-in unit in paragraph (1) of this rule or meets the elements certified in subparagraph (4)(a)2. of this rule, the Department will issue a denial of a CAIR opt-in permit for the unit.

(g) Date of entry into CAIR NO_x Ozone Season Trading Program. A unit for which an initial CAIR opt-in permit is issued by the Department shall become a CAIR NO_x Ozone Season opt-in unit, and a CAIR NO_x Ozone Season unit, as of the later of May 1, 2009 or May 1 of the first control period during which such CAIR opt-in permit is issued.

(h) Repowered CAIR NO_X Ozone Season opt-in unit.

1. If the CAIR designated representative requests, and the Department issues a CAIR opt-in permit providing for, allocation to a CAIR NO_X Ozone Season opt-in unit of CAIR NO_X Ozone Season allowances under subparagraph (9)(c) of this rule and such unit is repowered after its date of entry into the CAIR NO_X Ozone Season Trading Program under subparagraph (g) of this paragraph, the repowered unit shall be treated as a CAIR NO_X Ozone Season opt-in unit replacing the original CAIR NO_X Ozone Season opt-in unit, as of the date of start-up of the repowered unit's combustion chamber.

2. Notwithstanding subparagraphs (c) and (d) of this paragraph, as of the date of start-up under subparagraph (h)1. of this paragraph, the repowered unit shall be deemed to have the same date of commencement of operation, date of commencement of commercial operation, baseline heat input, and baseline NO_X emission rate as the original CAIR NO_X Ozone Season opt-in unit, and the original CAIR NO_X Ozone Season opt-in unit shall no longer be treated as a CAIR NO_X Ozone Season opt-in unit or a CAIR NO_X Ozone Season unit.

(6) CAIR opt-in permit contents.

(a) Each CAIR opt-in permit will contain:

1. All elements required for a complete CAIR permit application under rule 335-3-8-.27(3);

2. The certification in subparagraph (4)(a)2. of this rule;

3. The unit's baseline heat input under subparagraph (5)(c) of this rule;

4. The unit's baseline NO_X emission rate under subparagraph (5)(d) of this rule;

5. A statement whether the unit is to be allocated CAIR NO_X Ozone Season allowances under subparagraph (9)(b) or (c) of this rule (subject to the conditions in subparagraphs (5)(h) and (7)(g) of this rule);

6. A statement that the unit may withdraw from the CAIR NO_X Ozone Season Trading Program only in accordance with paragraph (7) of this rule; and

7. A statement that the unit is subject to, and the owners and operators of the unit must comply with, the requirements of paragraph (8) of this rule.

(b) Each CAIR opt-in permit is deemed to incorporate automatically the definitions of terms under rule 335-3-8-.25(2) and, upon recordation by the Administrator under rule 335-3-8-.30, 335-3-8-.31, or 335-3-8-.33, every allocation, transfer, or deduction of CAIR NO_X Ozone Season allowances to or from the compliance account of the source that includes a CAIR NO_X Ozone Season opt-in unit covered by the CAIR opt-in permit.

(c) The CAIR opt-in permit shall be included, in a format specified by the Department, in the CAIR permit for the source where the CAIR NO_x Ozone Season opt-in unit is located and in a Title V operating permit or other federally enforceable permit for the source.

(7) Withdrawal from CAIR NO_x Ozone Season Trading Program. Except as provided under subparagraph (g) of this paragraph, a CAIR NO_x Ozone Season opt-in unit may withdraw from the CAIR NO_x Ozone Season Trading Program, but only if the Department issues a notification to the CAIR designated representative of the CAIR NO_x Ozone Season opt-in unit of the acceptance of the withdrawal of the CAIR NO_x Ozone Season opt-in unit in accordance with subparagraph (d) of this paragraph.

(a) Requesting withdrawal. In order to withdraw a CAIR NO_x Ozone Season opt-in unit from the CAIR NO_x Ozone Season Trading Program, the CAIR designated representative of the CAIR NO_x Ozone Season opt-in unit shall submit to the Department a request to withdraw effective as of midnight of September 30 of a specified calendar year, which date must be at least 4 years after September 30 of the year of entry into the CAIR NO_x Ozone Season Trading Program under subparagraph (5)(g) of this rule. The request must be submitted no later than 90 days before the requested effective date of withdrawal.

(b) Conditions for withdrawal. Before a CAIR NO_x Ozone Season opt-in unit covered by a request under subparagraph (a) of this paragraph may withdraw from the CAIR NO_x Ozone Season Trading Program and the CAIR opt-in permit may be terminated under subparagraph (e) of this paragraph, the following conditions must be met:

1. For the control period ending on the date on which the withdrawal is to be effective, the source that includes the CAIR NO_x Ozone Season opt-in unit must meet the requirement to hold CAIR NO_x Ozone Season allowances under rule 335-3-8-.25(6)(c) and cannot have any excess emissions.

2. After the requirement for withdrawal under subparagraph (b)1. of this paragraph is met, the Administrator will deduct from the compliance account of the source that includes the CAIR NO_x Ozone Season opt-in unit CAIR NO_x Ozone Season allowances equal in amount to and allocated for the same or a prior control period as any CAIR NO_x Ozone Season allowances allocated to the CAIR NO_x Ozone Season opt-in unit under paragraph (9) of this rule for any control period for which the withdrawal is to be effective. If there are no remaining CAIR NO_x Ozone Season units at the source, the Administrator will close the compliance account, and the owners and operators of the CAIR NO_x Ozone Season opt-in unit may submit a CAIR NO_x Ozone Season allowance transfer for any remaining CAIR NO_x Ozone Season allowances to another CAIR NO_x Ozone Season Allowance Tracking System in accordance with rule 335-3-8-.31.

(c) Notification.

1. After the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are met (including deduction of the full amount of CAIR NO_X Ozone Season allowances required), the Department will issue a notification to the CAIR designated representative of the CAIR NO_X Ozone Season opt-in unit of the acceptance of the withdrawal of the CAIR NO_X Ozone Season opt-in unit as of midnight on September 30 of the calendar year for which the withdrawal was requested.

2. If the requirements for withdrawal under subparagraphs (a) and (b) of this paragraph are not met, the Department will issue a notification to the CAIR designated representative of the CAIR NO_X Ozone Season opt-in unit that the CAIR NO_X Ozone Season opt-in unit's request to withdraw is denied. Such CAIR NO_X Ozone Season opt-in unit shall continue to be a CAIR NO_X Ozone Season opt-in unit.

(d) Permit amendment. After the Department issues a notification under subparagraph (c)1. of this paragraph that the requirements for withdrawal have been met, the Department will revise the CAIR permit covering the CAIR NO_X Ozone Season opt-in unit to terminate the CAIR opt-in permit for such unit as of the effective date specified under subparagraph (c)1. of this paragraph. The unit shall continue to be a CAIR NO_X Ozone Season opt-in unit until the effective date of the termination and shall comply with all requirements under the CAIR NO_X Ozone Season Trading Program concerning any control periods for which the unit is a CAIR NO_X Ozone Season opt-in unit, even if such requirements arise or must be complied with after the withdrawal takes effect.

(e) Reapplication upon failure to meet conditions of withdrawal. If the Department denies the CAIR NO_X Ozone Season opt-in unit's request to withdraw, the CAIR designated representative may submit another request to withdraw in accordance with subparagraphs (a) and (b) of this paragraph.

(f) Ability to reapply to the CAIR NO_X Ozone Season Trading Program. Once a CAIR NO_X Ozone Season opt-in unit withdraws from the CAIR NO_X Ozone Season Trading Program and its CAIR opt-in permit is terminated under this paragraph, the CAIR designated representative may not submit another application for a CAIR opt-in permit under paragraph (4) of this rule for such CAIR NO_X Ozone Season opt-in unit before the date that is 4 years after the date on which the withdrawal became effective. Such new application for a CAIR opt-in permit will be treated as an initial application for a CAIR opt-in permit under paragraph (5) of this rule.

(g) Inability to withdraw. Notwithstanding subparagraphs (a) through (f) of this paragraph, a CAIR NO_X Ozone Season opt-in unit shall not be eligible to withdraw from the CAIR NO_X Ozone Season Trading Program if the CAIR designated representative of the CAIR NO_X Ozone Season opt-in unit requests, and the Department issues a CAIR opt-in permit providing for, allocation to the CAIR NO_X Ozone Season opt-in unit of CAIR NO_X Ozone Season allowances under subparagraph (9)(c) of this rule.

(8) Change in regulatory status.

(a) Notification. If a CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), then the CAIR designated representative shall notify in writing the Department and the Administrator of such change in the CAIR NO_x Ozone Season opt-in unit's regulatory status, within 30 days of such change.

(b) Department's and Administrator's actions.

1. If a CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), the Department will revise the CAIR NO_x Ozone Season opt-in unit's CAIR opt-in permit to meet the requirements of a CAIR permit under rule 335-3-8-.27(4), and remove the CAIR opt-in permit provision, as of the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4).

2. The Administrator will deduct from the compliance account of the source that includes the CAIR NO_x Ozone Season opt-in unit that becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), CAIR NO_x Ozone Season allowances equal in amount to and allocated for the same or a prior control period as:

(i) Any CAIR NO_x Ozone Season allowances allocated to the CAIR NO_x Ozone Season opt-in unit under paragraph (9) of this rule for any control period after the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4); and

(ii) If the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) is not September 30, the CAIR NO_x Ozone Season allowances allocated to the CAIR NO_x Ozone Season opt-in unit under paragraph (9) of this rule for the control period that includes the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), multiplied by the ratio of the number of days, in the control period, starting with the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) divided by the total number of days in the control period and rounded to the nearest whole allowance as appropriate.

3. The CAIR designated representative shall ensure that the compliance account of the source that includes the CAIR NO_x Ozone Season opt-in unit that becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) contains the CAIR NO_x Ozone Season allowances necessary for completion of the deduction under subparagraph (b)2. of this paragraph.

4. For every control period after the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), the CAIR NO_x Ozone Season opt-in unit will be allocated CAIR NO_x Ozone Season allowances under rule 335-3-8-.29(3).

(i) If the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4) is not September 30, the following amount of CAIR NO_x Ozone Season allowances will be allocated to the CAIR NO_x Ozone Season opt-in unit (as a CAIR NO_x Ozone Season unit) under rule 335-3-8-.29(3) for the control period that includes the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4):

(I) The amount of CAIR NO_x Ozone Season allowances otherwise allocated to the CAIR NO_x Ozone Season opt-in unit (as a CAIR NO_x Ozone Season unit) under rule 335-3-8-.29(3) for the control period multiplied by;

(II) The ratio of the number of days, in the control period, starting with the date on which the CAIR NO_x Ozone Season opt-in unit becomes a CAIR NO_x Ozone Season unit under rule 335-3-8-.25(4), divided by the total number of days in the control period; and

(III) Rounded to the nearest whole allowance as appropriate.

(9) CAIR NO_x Ozone Season allowance allocations to CAIR NO_x Ozone Season opt-in units.

(a) Timing requirements.

1. When the CAIR opt-in permit is issued under subparagraph (5)(e) of this rule, the Department will allocate CAIR NO_x Ozone Season allowances to the CAIR NO_x Ozone Season opt-in unit, and submit to the Administrator the allocation for the control period in which a CAIR NO_x Ozone Season opt-in unit enters the CAIR NO_x Ozone Season Trading Program under subparagraph (5)(g) of this rule, in accordance with subparagraph (b) or (c) of this paragraph.

2. By no later than July 31 of the control period after the control period in which a CAIR NO_x Ozone Season opt-in unit enters the CAIR NO_x Ozone Season Trading Program under subparagraph (5)(g) of this rule and July 31 of each year thereafter, the Department will allocate CAIR NO_x Ozone Season allowances to the CAIR NO_x Ozone Season opt-in unit, and submit to the Administrator the allocation for the control period that includes such submission deadline and in which the unit is a CAIR NO_x Ozone Season opt-in unit, in accordance with subparagraph (b)or (c) of this paragraph.

(b) Calculation of allocation. For each control period for which a CAIR NO_x Ozone Season opt-in unit is to be allocated CAIR NO_x Ozone Season allowances, the Department will allocate in accordance with the following procedures:

1. The heat input (in mmBtu) used for calculating the CAIR NO_x Ozone Season allowance allocation will be the lesser of:

(i) The CAIR NO_x Ozone Season opt-in unit's baseline heat input determined under subparagraph (5)(c) of this rule; or

(ii) The CAIR NO_x Ozone Season opt-in unit's heat input, as determined in accordance with rule 335-3-8-.32, for the immediately prior control period, except when the allocation is being calculated for the control period in which the CAIR NO_x Ozone Season opt-in unit enters the CAIR NO_x Ozone Season Trading Program under subparagraph (5)(g) of this rule.

2. The NO_x emission rate (in lb/mmBtu) used for calculating CAIR NO_x Ozone Season allowance allocations will be the lesser of:

(i) The CAIR NO_x Ozone Season opt-in unit's baseline NO_x emissions rate (in lb/mmBtu) determined under subparagraph (5)(d) of this rule and multiplied by 70 percent; or

(ii) The most stringent State or Federal NO_x emissions limitation applicable to the CAIR NO_x Ozone Season opt-in unit at any time during the control period for which CAIR NO_x Ozone Season allowances are to be allocated.

3. The Department will allocate CAIR NO_x Ozone Season allowances to the CAIR NO_x Ozone Season opt-in unit in an amount equaling the heat input under subparagraph (b)1. of this paragraph, multiplied by the NO_x emission rate under subparagraph (b)2. of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

(c) Notwithstanding subparagraph (b) of this paragraph and if the CAIR designated representative requests, and the Department issues a CAIR opt-in permit (based on a demonstration of the intent to repower stated under paragraph (4)(a)5. of this rule) providing for, allocation to a CAIR NO_x Ozone Season opt-in unit of CAIR NO_x Ozone Season allowances under this paragraph (subject to the conditions in subparagraphs (5)(h) and (7)(g) of this rule), the Department will allocate to the CAIR NO_x Ozone Season opt-in unit as follows:

1. For each control period in 2009 through 2014 for which the CAIR NO_x Ozone Season opt-in unit is to be allocated CAIR NO_x Ozone Season allowances,

(i) The heat input (in mmBtu) used for calculating CAIR NO_x Ozone Season allowance allocations will be determined as described in subparagraph (b)1. of this paragraph.

(ii) The NO_x emission rate (in lb/mmBtu) used for calculating CAIR NOX Ozone Season allowance allocations will be the lesser of:

(I) The CAIR NO_x Ozone Season opt-in unit's baseline NO_x emissions rate (in lb/mmBtu) determined under subparagraph (5)(d) of this rule; or

(II) The most stringent State or Federal NO_x emissions limitation applicable to the CAIR NO_x Ozone Season opt-in unit at any time during the control period in which the CAIR NO_x Ozone Season opt-in unit enters the CAIR NO_x Ozone Season Trading Program under subparagraph (5)(g) of this rule.

(iii) The Department will allocate CAIR NO_X Ozone Season allowances to the CAIR NO_X Ozone Season opt-in unit in an amount equaling the heat input under subparagraph (c)1.(i) of this paragraph, multiplied by the NO_X emission rate under subparagraph (c)1.(ii) of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

2. For each control period in 2015 and thereafter for which the CAIR NO_X Ozone Season opt-in unit is to be allocated CAIR NO_X Ozone Season allowances,

(i) The heat input (in mmBtu) used for calculating the CAIR NO_X Ozone Season allowance allocations will be determined as described in subparagraph (b)1. of this paragraph.

(ii) The NO_X emission rate (in lb/mmBtu) used for calculating the CAIR NO_X Ozone Season allowance allocation will be the lesser of:

(I) 0.15 lb/mmBtu;

(II) The CAIR NO_X Ozone Season opt-in unit's baseline NO_X emissions rate (in lb/mmBtu) determined under subparagraph (5)(d) of this rule; or

(III) The most stringent State or Federal NO_X emissions limitation applicable to the CAIR NO_X Ozone Season opt-in unit at any time during the control period for which CAIR NO_X Ozone Season allowances are to be allocated.

(iii) The Department will allocate CAIR NO_X Ozone Season allowances to the CAIR NO_X Ozone Season opt-in unit in an amount equaling the heat input under subparagraph (c)2.(i) of this paragraph, multiplied by the NO_X emission rate under subparagraph (c)2.(ii) of this paragraph, divided by 2,000 lb/ton, and rounded to the nearest whole allowance as appropriate.

(d) Recordation.

1. The Administrator will record, in the compliance account of the source that includes the CAIR NO_X Ozone Season opt-in unit, the CAIR NO_X Ozone Season allowances allocated by the Department to the CAIR NO_X Ozone Season opt-in unit under subparagraph (a)1. of this paragraph.

2. By September 1 of the control period in which a CAIR NO_X Ozone Season opt-in unit enters the CAIR NO_X Ozone Season Trading Program under subparagraph (5)(g) of this rule, and September 1 of each year thereafter, the Administrator will record, in the compliance account of the source that includes the CAIR NO_X Ozone Season opt-in unit, the CAIR NO_X Ozone Season allowances allocated by the Department to the CAIR NO_X Ozone Season opt-in unit under subparagraph (a)2. of this paragraph.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: July 11, 2006.
Amended: April 3, 2007.

Part H –

Reconciliation Statements

No comments were received.

Part I –

Legal Authority

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
1421 PEACHTREE ST., N. E.
ATLANTA, GEORGIA 30309

January 30, 1974

Mr. James W. Cooper, Director
Division of Air Pollution Control
Alabama Air Pollution Control Commission
645 South McDonough Street
Montgomery, Alabama 36104

Dear Mr. Cooper:

On January 2, 1974, Governor Wallace informed the Administrator that your agency has the authority to prepare and submit any revisions made to the Alabama Air Implementation Plan.

With this letter I make formal acknowledgement of your authority. Moreover, I thank you for your cooperation in the past, and look forward to the continuation of smooth working relations between your agency and my Air Programs Office.

Sincerely,

John C White

for Jack E. Ravan
Regional Administrator

STATE OF ALABAMA

GOVERNOR'S OFFICE

MONTGOMERY 36130

GUY HUNT
GOVERNOR

March 13, 1991

Mr. Greer Tidwell
Regional Administrator
U.S. Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Tidwell:

This letter is to notify you that I have designated the Alabama Department of Environmental Management (the Department) as the lead state agency for the purposes of Alabama's responsibilities under the Federal Clean Air Act. The Department is authorized to take all actions necessary and appropriate to secure to the state the benefits of said federal act under the Alabama Environmental Management Act, Code of Alabama 1975, Section 22-22A-4(n), and by implication through the Alabama Air Pollution Control Act, Code of Alabama 1975, Section 22-28-11(13) and (14).

This action that I am taking will help facilitate the implementation of the new Clean Air Act Amendments in Alabama. I am sure the Department and your office will continue to cooperate in managing Alabama's environmental resources.

Sincerely,

Guy Hunt

Guy Hunt
Governor

GH:ch

cc: Mr. Leigh Pegues

Part J –

Final Regulations as Submitted to the Legislative Reference Service

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION - AIR POLLUTION CONTROL PROGRAM

CHAPTER 335-3-1
GENERAL PROVISIONS

TABLE OF CONTENTS

335-3-1-.01 Purpose. The purpose of these rules and regulations is to protect and enhance the public health and welfare through the development and implementation of coordinated statewide programs for the prevention, abatement and control of air pollution.

Author: Tommy E. Bryan.
Statutory Authority: Code of Alabama 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: June 22, 1989.
Amended:

335-3-1-.02 Definitions.

(1) Meaning of Terms. As used in these rules and regulations, terms shall have the meanings ascribed in this rule.

(a) "Act" shall mean the Alabama Air Pollution Control Act of 1971, Act No. 769, Regular Session, 1971.

(b) "Adjudication" shall mean decisions, orders, decrees, determinations, or rulings by the Commission or its authorized Hearing officers and is

Department by June 30 of the calendar year following the emission year being reported.

(b) The data required under subparagraph (a) of this paragraph shall be submitted electronically to the Department in a format prescribed and provided by the Department.

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-14, 22-28-18, 22-28-20, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: April 3, 2003.
Amended:

335-3-1-.16 Reserved.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION - AIR POLLUTION CONTROL PROGRAM

CHAPTER 335-3-5
CONTROL OF SULFUR COMPOUND EMISSIONS

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335-3-5-.01 Fuel Combustion.

(1) Emission Limitations.

(a) Sulfur Dioxide Category I Counties. No person shall cause or permit the operation of a fuel burning installation in a Sulfur Dioxide Category I County or in Jefferson County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 1.8 pounds per million BTU heat input.

(b) Sulfur Dioxide Category II Counties. No person shall cause or permit the operation of a fuel burning installation in a Sulfur Dioxide Category II County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 4.0 pounds per million BTU heat input.

(c) Sulfur Dioxide - Jackson County. No person shall cause or permit the operation of an electric utility steam generating installation having a total rated capacity greater than 5,000 million BTU per hour in Jackson County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 1.2 pounds per million BTU heat input.

(d) Sulfur Dioxide - Colbert County. No person shall cause or permit the operation of electric utility steam generating units with rated capacities greater than 1,000 million BTU per hour which commenced operation prior to

335-3-5-.06 Reserved.

335-3-5-.07 Reserved.

335-3-5-.08 Reserved.

335-3-5-.09 Reserved.

335-3-5-.10 Reserved.

335-3-5-.11 Reserved.

335-3-5-.12 Reserved.

335-3-5-.13 Reserved.

335-3-5-.14 Reserved.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION - AIR POLLUTION CONTROL PROGRAM

CHAPTER 335-3-8
CONTROL OF NITROGEN OXIDES EMISSIONS

TABLE OF CONTENTS

335-3-8-.01 Standards for Portland Cement Kilns.

(1) Applicability. The requirements of this rule apply only to Portland cement kilns in the Counties of Autauga, Bibb, Blount, Calhoun, Chambers,

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-16, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: March 22, 2005.
Amended:

335-3-8-.05 New Combustion Sources.

(1) No person shall cause or permit emissions of nitrogen oxides from a new gas-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.20 pounds per million BTU of heat input per hour.

(2) No person shall cause or permit emissions of nitrogen oxides from a new oil-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.30 pounds per million BTU of heat input per hour.

(3) No person shall cause or permit emission of nitrogen oxides from a new coal-fired boiler with a capacity of 250 million BTU per hour or more in excess of 0.7 pounds per million BTU of heat input per hour.

(4) For purposes of this rule, the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of nitrogen oxides that passes through a stack or stacks.

Author: James W. Cooper and John E. Daniel.
Statutory Authority: Code of Alabama 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 18, 1972.
Amended: April 6, 2001; January 16, 2012.

335-3-8-.06 Standards for New Combined-Cycle Electric Generating Units.

(1) Applicability. The requirements of this rule apply to all natural gas-fired and fuel oil-fired combined-cycle electric generating units which commence operation on or after April 1, 2003. The requirements of this rule do not pre-empt the applicability of any other State or Federal regulations.

(2) Definitions. For the purposes of this rule, the following definitions apply:

(a) "Combined-Cycle Electric Generating Unit" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(b) "Commence Operation" means to have begun to produce steam, gas, or other heated medium used to generate electricity for use or sale, including test generation.

(c) "Fuel Oil" means any petroleum-based fuel (including diesel fuel) as defined by the American Society for Testing and Materials in ASTM D396-90a, "Standard Specification for Fuel Oils".

(d) "Natural Gas" means a naturally fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

(3) Emission Limitations.

(a) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by natural gas in excess of 4.0 ppmvd at 15% O_2.

(b) No person shall cause or permit the emissions of nitrogen oxides from combined-cycle electric generating units fired by fuel oil in excess of 15.0 ppmvd at 15% O_2.

(4) Compliance Method. Compliance with the nitrogen oxides emissions limitations in paragraph (3) of this rule shall be determined by EPA Reference Method 20 as found in 40 CFR 60, Appendix A [and incorporated by reference in rule 335-3-10-.03(1)].

Author: Ronald W. Gore.
Statutory Authority: Code of Alabama 1975, §§22-28-10, 22-28-11, 22-28-14, 22-28-18, 22-28-20, 22-28-22, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 23, 2003.
Amended: January 16, 2012.

335-3-8-.07 Reserved.

335-3-8-.08 Reserved.

335-3-8-.09 Reserved.

335-3-8-.10 Reserved.

335-3-8-.11 Reserved.

335-3-8-.12 Reserved.

335-3-8-.15 Reserved.

335-3-8-.13 Reserved.

335-3-8-.14 Reserved.

335-3-8-.15 Reserved.

335-3-8-.16 Reserved.

335-3-8-.17 Reserved.

335-3-8-.18 Reserved.

335-3-8-.19 Reserved.

335-3-8-.20 Reserved.

335-3-8-.21 Reserved.

335-3-8-.22 Reserved.

335-3-8-.23 Reserved.

335-3-8-.24 Reserved.

335-3-8-.25 Reserved.

335-3-8-.26 Reserved.

335-3-8-.27 Reserved.

335-3-8-.28 Reserved.

335-3-8-.29 Reserved.

335-3-8-.30 Reserved.

335-3-8-.31 Reserved.

335-3-8-.32 Reserved.

335-3-8-.33 Reserved.

TABLE 3—ADDITIONAL REGULATIONS APPROVED FOR THE ENERGY FACILITIES SITE EVALUATION COUNCIL (EFSEC) JURISDICTION

[See the SIP-approved provisions of WAC 463–78–020 for jurisdictional applicability]

State citation	Title/subject	State effective date	EPA approval date	Explanations
*	*	*	*	*
Washington Administrative Code, Chapter 173–400 Regulations Incorporated by Reference in WAC 463–78–005				
*	*	*	*	*
173–400–060 ..	Emission Standards for General Process Units.	2/10/05	5/30/17, 82 FR 24531.	
*	*	*	*	*

* * * * *

TABLE 8—ADDITIONAL REGULATIONS APPROVED FOR THE SOUTHWEST CLEAN AIR AGENCY (SWCAA) JURISDICTION

[Applicable in Clark, Cowlitz, Lewis, Skamania and Wahkiakum counties, excluding facilities subject to Energy Facilities Site Evaluation Council (EFSEC) jurisdiction, Indian reservations and any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction, and facilities subject to the applicability sections of WAC 173–405–012, 173–410–012, and 173–415–012]

State/local citation	Title/subject	State/local effective date	EPA approval date	Explanations
Southwest Clean Air Agency Regulations				
SWCAA 400—General Regulations for Air Pollution Sources				
*	*	*	*	*
400–113	Requirements for New Sources in Attainment or Nonclassifiable Areas.	10/09/16	04/10/17, 82 FR 17136	Except: 400–113(5).
*	*	*	*	*

* * * * *

[FR Doc. 2018–27774 Filed 2–7–19; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2017–0358; FRL–9988–69–OAR]

RIN 2060–AT66

National Emission Standards for Hazardous Air Pollutants: Friction Materials Manufacturing Facilities Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Friction Materials Manufacturing Facilities source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing periods of startup, shutdown, and malfunction (SSM). We are finalizing our proposed determination that the risks from the category are acceptable and that the current NESHAP provides an ample margin of safety to protect public health. We identified no new cost-effective controls under the technology review to achieve further emissions reductions. These final amendments include amendments to revise reporting requirements for deviations. These amendments are made under the authority of the Clean Air Act (CAA) and will improve the effectiveness of the rule. The amendments are environmentally neutral.

DATES: This final rule is effective on February 8, 2019.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2017–0358. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Korbin Smith, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711; telephone number: (919) 541–2416; fax number: (919) 541–4991; and email address: *smith.korbin@epa.gov.* For specific information regarding the risk modeling methodology, contact James Hirtz, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0881; fax number: (919) 541–0840; and email address: *hirtz.james@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (312) 353–6266; and email address: *ayres.sara@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA Clean Air Act
CFR Code of Federal Regulations
EPA Environmental Protection Agency
HAP hazardous air pollutant(s)
ICR Information Collection Request
km kilometer
MACT maximum achievable control technology
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NTTAA National Technology Transfer and Advancement Act
OMB Office of Management and Budget
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RFPC Railroad Friction Products Corporation
RTC response to comment
RTR residual risk and technology review
SSM startup, shutdown, and malfunction
tpy tons per year
UMRA Unfunded Mandates Reform Act

Background information. On May 3, 2018, the EPA proposed revisions to the Friction Materials Manufacturing Facilities NESHAP based on our RTR. In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments is available in ''Summary of Public Comments and Responses for Friction Materials Manufacturing Facilities Risk and Technology Review,'' Docket ID No. EPA–HQ–OAR–2017–0358. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source category	NAICS [1] code
Friction Materials Manufacturing Facilities.	33634, 327999, 333613.

[1] North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://*

www.epa.gov/stationary-sources-air-pollution/friction-materials-manufacturing-facilities-national-emission. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under CAA section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by April 9, 2019. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to, those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 83 FR 19499.

B. What is the Friction Materials Manufacturing Facilities source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA promulgated the Friction Materials Manufacturing Facilities NESHAP on October 18, 2002 (67 FR 64498). The standards are codified at 40 Code of Federal Regulations (CFR) part 63, subpart QQQQQ. The Friction Materials Manufacturing Facilities industry consists of facilities that manufacture friction materials using a solvent-based process. Friction materials are used in the manufacture of products used to accelerate or decelerate objects. Products that use friction materials include, but are not limited to, disc brake pucks, disc brake pads, brake linings, brake shoes, brake segments, blocks, brake discs, clutch facings, and clutches. The source category covered by this MACT standard currently includes two facilities.

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

The affected source is each friction material manufacturing solvent mixer. The NESHAP regulates emissions of HAP through emission standards for solvent, which are emitted from solvent mixers. Facilities subject to the NESHAP must reduce the emissions by using solvent recovery or another approved method. The emission standards are the same for new and existing solvent mixers, but are different for small and large solvent mixers. The emission limit for new, reconstructed, and existing large solvent mixers requires each facility that operates a large solvent mixer to limit HAP solvent emissions to the atmosphere to no more than 30 percent of that which would otherwise be emitted in the absence of solvent recovery and/or solvent substitution, based on a 7-day block average. The emission limit for new, reconstructed, and existing small solvent mixers requires facilities operating small solvent mixers to limit HAP solvent emissions to the atmosphere to no more than 15 percent of that which would otherwise be emitted in the absence of solvent recovery and/or solvent substitution, based on a 7-day block average.

C. What changes did we propose for the Friction Materials Manufacturing Facilities source category in our May 3, 2018, proposal?

On May 3, 2018, the EPA published a proposed rule in the **Federal Register** for the Friction Materials Manufacturing Facilities NESHAP, 40 CFR part 63, subpart QQQQQ, that took into consideration the RTR analyses. In the proposed rule, we proposed revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), which vacated two provisions in the EPA's ''General Provisions'' implementing CAA section 112 at 40 CFR part 63, subpart A, that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. In addition, we proposed to revise the rule's reporting requirements for deviations.

III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Friction Materials Manufacturing Facilities source category. This action also finalizes other changes to the NESHAP, including amendments to the SSM provisions of the MACT rule and revisions to the rule's reporting requirements for deviations.

A. What are the final rule amendments based on the risk review for the Friction Materials Manufacturing Facilities source category?

The EPA proposed no changes to the 40 CFR part 63, subpart QQQQQ, NESHAP based on the risk review conducted pursuant to CAA section 112(f). We are finalizing our proposed determination that risks from the source category following implementation of MACT standards are acceptable, considering all the health information and factors evaluated, and also considering risk estimation uncertainty. The EPA received no new data or other information during the public comment period that affected our determinations. Therefore, we are not requiring additional controls and, thus, are not making any revisions to the existing standards, in order to meet the requirements of CAA section 112(f). (However, as previously noted, we are making limited changes in order to improve implementation and to conform our standards to the 2008 *Sierra Club* ruling regarding SSM.)

B. What are the final rule amendments based on the technology review for the Friction Materials Manufacturing Facilities source category?

We determined that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. The EPA received no new data or other information during the public comment period that affected our determinations. Therefore, we are not finalizing revisions to the MACT standards in order to meet the requirements of CAA section 112(d)(6). (Again, however, we are making limited changes for other purposes, as previously noted and explained in detail below.)

C. What are the final rule amendments addressing emissions during periods of SSM?

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 ''General Provisions'' regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We have eliminated the SSM exemption in this rule. Consistent with *Sierra Club* v. *EPA,* the EPA has established standards in this rule that apply at all times. We have also revised Table 4 to subpart QQQQQ of Part 63 (the General Provisions applicability table) in several respects as is explained in more detail below. For example, we have eliminated the incorporation of the General Provisions' requirement that the source develop an SSM plan. We have also eliminated and revised certain recordkeeping and reporting that are related to the SSM exemption as described in detail in the proposal and summarized below.

D. What other changes have been made to the NESHAP?

The EPA is promulgating revisions to the rule's reporting requirements at 40 CFR 63.9540(c)(2) for deviations by requiring facilities to now report the date, time, a list of affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions, and the corrective action taken. In addition, facilities must continue to report the number, duration, and cause of deviations (including unknown cause, if applicable). To see how the revised regulatory text compares to the previous text, see the document, ''Redline Version Showing Proposed Changes to 40 CFR part 63 subpart QQQQQ,'' presenting 40 CFR 63.9540(c)(2), in Docket ID No. EPA–HQ–OAR–2017–0358.

E. What are the effective and compliance dates of the standards?

The revisions to the NESHAP being promulgated in this action are effective on February 8, 2019. The compliance date for existing affected sources, whether subject to the existing or new source limits in the original rule, to comply with the revised requirements is no later than 180 days after the effective date of the final rule. Affected sources that commenced construction or reconstruction after May 3, 2018, must comply with the all of the standards immediately upon the effective date of the standard, February 8, 2019, or upon startup, whichever is later.

All affected existing facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart QQQQQ, until the applicable compliance date of the amended rule. The final action is not a ''major rule'' as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA sections 112(d)(10) and 112(f)(3). For

existing sources, we are finalizing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart QQQQQ. As discussed elsewhere in this preamble, we are changing the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule, and make any necessary adjustments in their practice of reporting deviations per the rule's revised requirements; adjust parameter monitoring and recording systems to accommodate revisions; and update their operations to reflect the revised requirements. From our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is finalizing that existing affected sources must be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date.

IV. What is the rationale for our final decisions and amendments for the Friction Materials Manufacturing Facilities source category?

For each issue, this section provides a description of what we proposed and what we are finalizing, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket, EPA–HQ–OAR–2017–0358.

A. Residual Risk Review for the Friction Materials Manufacturing Facilities Source Category

1. What did we propose pursuant to CAA section 112(f) for the Friction Materials Manufacturing Facilities source category?

For the 40 CFR part 63, subpart QQQQQ, category risk assessment conducted at proposal, the EPA estimated risks based on actual and allowable emissions from the two facilities subject to the Friction Materials Manufacturing Facilities NESHAP. Allowable emissions for the Railroad Friction Products Corporation (RFPC) at proposal were estimated to be equal to actual emissions. Allowable emissions for Knowlton Technologies LLC were set to the standard minimum of 70 percent of what otherwise would be emitted. The estimated inhalation cancer risk to the individual most exposed to emissions from the source category was less than 1-in-1-million. The assessment showed that no people faced an increased cancer risk greater than 1-in-1 million due to inhalation exposure to HAP emissions from this source category. The risk analysis at proposal indicated very low cancer incidence (0.000005 excess cancer cases per year, or one excess case every 200,000 years), as well as low potential for adverse chronic noncancer health effects. The acute screening assessment indicated no pollutants or facilities exceeding a hazard quotient value of 1. Therefore, we found there was little potential concern of acute noncancer health impacts. In evaluating the potential for multipathway effects, no HAP emissions known to be persistent and bio-accumulative in the environment were found in this source category. Therefore, we estimate that there is no multipathway risk from HAP emissions from this source category. Considering all the health risk information, the EPA proposed that the risks from the Friction Materials Manufacturing Facilities source category were acceptable, and that implementation of the existing standards provide an ample margin of safety to protect public health.

2. How did the risk review change for the Friction Materials Manufacturing Facilities source category?

In response to comments on the proposed 40 CFR part 63, subpart QQQQQ RTR, the EPA acknowledges that, although the EPA's method of calculating cancer incidence was implemented correctly, with the results presented correctly in the RTR risk report, we agree that the average risk values provided for the demographic analysis were calculated incorrectly. The EPA corrected the values for the demographics analysis and provided those corrections in the final RTR risk report for this source category. After making this correction, the EPA finds that the risks presented by HAP emissions from this source category are still acceptable and that the NESHAP protects public health with an ample margin of safety. The demographic analysis provides information about the demographic composition of the populations exposed to HAP emissions from this source category. The correction to the average risk values for the demographic analysis did not affect any decision in this rulemaking. All other parts of the risk review remained unchanged from proposal.

3. What key comments did we receive on the risk review, and what are our responses?

We received several comments regarding the proposed risk review and our determination that no revisions were warranted under CAA section 112(f)(2). Generally, the comments misunderstood the type of data used for the development of the risk review or suggested changes to the underlying risk assessment methodology. After review of these comments, we determined that no changes were necessary. The comments and our specific responses can be found in the document, ''Summary of Public Comments and Responses for Friction Materials Manufacturing Facilities Risk and Technology Review,'' which is available in the docket for this action.

These comments resulted in the EPA correcting the demographic analysis, which did not result in a change in the EPA's determination that the risks for this source category are acceptable and that the NESHAP protects public health with an ample margin of safety.

Additionally, a stakeholder commented on how the EPA set allowable emissions equal to actual emissions at RFPC. The EPA agrees with the stakeholder that allowable emissions should have been calculated by setting the solvent mixer emissions at 30 percent of the total solvent used, which is the requirement in the rule. However, this would result in a lower emissions calculation than what was used at proposal to estimate risk at allowable emission levels. Therefore, the EPA has determined that the proposal risk estimates for allowable emissions were overestimated, and, since we found that even with this overestimate that risks are acceptable and that the current standards provide an ample margin of safety, it is not necessary to re-run the model file in order to reflect such a correction.

Lastly, one comment resulted in the EPA clarifying the inclusion of emissions that do not come from affected sources in the source category. The stakeholder points out that the EPA assumes fugitive emissions are controlled under this standard. The EPA clarifies in the response to comments (RTC) document that phenol and formaldehyde emissions from Knowlton are non-affected source fugitive

emissions. Including phenol and formaldehyde in the risk model results in a conservative assessment of risk presented by emissions that do not come from the affected sources in the source category, but from other points at the facility that are not subject to this NESHAP.

4. What is the rationale for our final approach and final decisions for the risk review?

We evaluated all the comments on the EPA's risk review and determined that other than the change in the demographic analysis calculation, which did not result in a change to the risk determination, no changes to the review are needed. For the reasons explained in the proposed rule, we determined that the risks from the Friction Materials Manufacturing Facilities source category are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, pursuant to CAA section 112(f)(2), we are finalizing our risk review determination as proposed.

B. Technology Review for the Friction Materials Manufacturing Facilities Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Friction Materials Manufacturing Facilities source category?

Our review of the developments in technology for the Friction Materials Manufacturing Facilities source category did not reveal any changes in practices, processes, and controls that warrant revisions to the emission standards. Because our review did not identify any cost-effective practices, processes, or controls to reduce emissions in the category since promulgation of the current NESHAP, we proposed that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6).

2. How did the technology review change for the Friction Materials Manufacturing Facilities source category?

The technology review did not change from proposal. Therefore, we are finalizing our proposal determination that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6).

3. What key comments did we receive on the technology review, and what are our responses?

We received several comments regarding the proposed technology review and our determination that no revisions were warranted under CAA section 112(d)(6). We received no comments that identified improved control technology, work practices, operational procedures, process changes, or pollution prevention approaches to reduce emissions in the category since promulgation of the current NESHAP. Generally, the commenters misunderstood the role of the technology review and the associated evaluations of technological advancements. After review of these comments, we determined that no changes were necessary. The comments and our specific responses can be found in the document, ''Summary of Public Comments and Responses for Friction Materials Manufacturing Facilities Risk and Technology Review,'' which is available in the docket for this action.

Of the comments pertaining to the technology review, there were several comments that addressed the EPA's discussion of non-solvent mixers. Several comments addressed the concern that the EPA was appearing to endorse facilities' averaging among mixers in order to comply with the standard. The EPA stated in the RTC document and reiterates here that compliance determinations are not part of the RTR, that the current standards apply on a mixer-by-mixer basis, and that the EPA is not proposing any changes to the source category or affected source definitions in this action.

4. What is the rationale for our final approach for the technology review?

Our technology review looked for add-on control technology that was not identified during the original NESHAP development and for improvements to existing add-on controls. We also looked for new work practices, operational procedures, process changes, pollution prevention alternatives, coating formulations, or application techniques that have the potential to reduce emissions. Since our review did not identify any cost-effective improved control technology, work practices, operational procedures, process changes, or pollution prevention approaches to reduce emissions in the category since promulgation of the current NESHAP, we proposed that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6). Since proposal, no information has been presented to cause us to change the proposed determination. Consequently, we are finalizing our CAA section 112(d)(6) determination as proposed.

C. SSM

1. What did we propose for the Friction Materials Manufacturing Facilities source category?

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 General Provisions regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We proposed amendments to the Friction Materials Manufacturing Facilities NESHAP to remove or revise provisions related to SSM that are not consistent with the requirement that the standards apply at all times. More information concerning SSM is in the preamble to the proposed rule (83 FR 19499).

2. How did the SSM provisions change for the Friction Materials Manufacturing Facilities source category?

The SSM provisions did not change from proposal.

3. What key comments did we receive on the SSM provisions, and what are our responses?

We received one comment supporting our proposed changes to the SSM provisions. The EPA acknowledges the comment supporting the proposed changes.

4. What is the rationale for our final approach for the SSM provisions?

We evaluated the comment on the EPA's proposed amendments to the SSM provisions. For the reasons explained in the proposed rule, we determined that these amendments remove or revise provisions related to SSM that are not consistent with the requirement that the standards apply at all times. More information concerning the proposed amendments to the SSM provisions is in the preamble to the proposed rule (83 FR 19499). We are finalizing the amendments to remove or revise provisions related to SSM, as proposed.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

There are currently two friction materials manufacturing facilities operating in the United States that are subject to the Friction Materials Manufacturing Facilities NESHAP. The 40 CFR part 63, subpart QQQQQ, affected source is the solvent mixers used for friction manufacturing products. A new affected source is a completely new friction products manufacturing source where previously no friction products manufacturing had existed.

B. What are the air quality impacts?

At the current level of control, the EPA estimates emissions of total HAP are approximately 240 tpy. Because we are not finalizing revisions to the emission limits other than to make them applicable during SSM periods, we do not anticipate any air quality impacts as a result of the proposed amendments, since facilities are already in compliance with emission limits during all periods, including SSM.

C. What are the cost impacts?

The two existing friction materials manufacturing facilities that are subject to the final amendments would incur a net cost savings resulting from the revised recordkeeping and reporting requirements. The 2016 equivalent annualized value (in 2016 dollars) of these net cost savings from 2019 through 2026 is $5,920 per year when costs are discounted at a 7-percent rate, and $6,648 per year when costs are discounted at a 3-percent rate. For further information on the costs and cost savings associated with the requirements being revised, see the memorandum, ''Economic Impact Analysis for Friction Material Manufacturing Final Rule,'' and the document, ''Friction Materials Manufacturing 2018 Supporting Statement,'' which are both available in the docket for this action.

D. What are the economic impacts?

As noted earlier, this action will result in a net cost savings to affected entities. This cost savings is not expected to have adverse economic impacts.

E. What are the benefits?

The EPA did not change any of the emission limit requirements and estimates the final changes to SSM, recordkeeping, reporting, and monitoring are not economically significant. Because these final amendments are not considered economically significant, as defined by Executive Order 12866 and because no emission reductions were estimated, we did not estimate any benefits from reducing emissions.

F. What analysis of environmental justice did we conduct?

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Friction Materials Manufacturing Facilities source category across different demographic groups within the populations living near facilities.[2]

The results of the demographic analysis was updated from proposal to reflect corrections made to the analysis from comments received by the EPA and are summarized in Table 2 below. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 2—FRICTION MATERIALS MANUFACTURING FACILITIES SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to Friction Materials Manufacturing Facilities [1]	Population with chronic hazard index above 1 Friction Materials Manufacturing Facilities
Total Population	317,746,049	0	0
Race by Percent:			
White	62	0	0
All Other Races	38	0	0
Race by Percent:			
White	62	0	0
African American	12	0	0
Native American	0.8	0	0
Other and Multiracial	7	0	0
Ethnicity by Percent:			
Hispanic	18	0	0
Non-Hispanic	82	0	0
Income by Percent:			
Below Poverty Level	14	0	0
Above Poverty Level	86	0	0
Education by Percent:			

[2] Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

TABLE 2—FRICTION MATERIALS MANUFACTURING FACILITIES SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS—Continued

	Nationwide	Population with cancer risk at or above 1-in-1 million due to Friction Materials Manufacturing Facilities [1]	Population with chronic hazard index above 1 Friction Materials Manufacturing Facilities
Over 25 and without High School Diploma	14	0	0
Over 25 and with a High School Diploma	86	0	0
Linguistically Isolated by Percent:			
Linguistically Isolated	6	0	0

[1] Based on actual emissions in the category.

The results of the Friction Materials Manufacturing Facilities source category demographic analysis indicate that emissions from the source category do not expose people to a cancer risk at or above 1-in-1 million based on actual or allowable emissions. Also, no people are exposed to a chronic noncancer target organ-specific hazard index greater than 1 based on actual or allowable emissions. The percentages of the at-risk population are much smaller than their respective nationwide percentages for all demographic groups.

The EPA received comment on our proposed rule stating that we ignored unacceptably disproportionate effects on environmental justice communities. As noted above, we corrected our demographic analysis. For this source category, cancer risks were less than 1-in-1 million and the noncancer hazards were less than 1. At these risk levels, all populations are exposed to an acceptable level with an ample margin of safety without any demographic group (including Native American Indians) being disproportionately impacted. A more detailed demographic risk analysis may be conducted at the facility level if risk findings for the source category indicate a level that is unacceptable without an ample margin of safety.

The EPA has, therefore, reaffirmed its determination that this final rule will not have disproportionately high and adverse human health or environmental effects on minority, low income, or indigenous populations because it maintains the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority, low income, or indigenous populations.

The methodology and the results of the demographic analysis are presented in a technical report, ''Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Friction Materials Manufacturing Facilities Source Category,'' available in Docket ID No. EPA–HQ–OAR–2017–0358 for this action.

G. What analysis of children's environmental health did we conduct?

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in ''Residual Risk Assessment for the Friction Materials Manufacturing Facilities Source Category in Support of the 2018 Risk and Technology Review Final Rule,'' available in Docket ID No. EPAHQ–OAR–2017–0358 for this action.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. Details on the estimated cost savings of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action.

C. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2025.08. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

We are finalizing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart QQQQQ, in the form of eliminating the SSM plan and reporting requirements and increasing reporting requirements for the semiannual report of deviation. We also recalculated the estimated recordkeeping burden for records of SSM to more accurately represent the removal of the SSM exemption, which is discussed in more detail in the memorandum, ''Email Correspondence Estimating the Cost of SSM Reporting with Knowlton Technologies, LLC.''

Respondents/affected entities: The respondents to the recordkeeping and reporting requirements are owners or operators of facilities that produce friction products subject to 40 CFR part 63, subpart QQQQQ.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart QQQQQ).

Estimated number of respondents: Two facilities.

Frequency of response: Initially and semiannually.

Total estimated burden: The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 535 hours (per year). Of these, 115 hours (per year) is the reduced burden to comply with the rule amendments. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be $35,200 (rounded, per year), including $544 annualized capital or operation and maintenance costs. This results in a decrease of $7,400 (rounded, per year) to comply with the amendments to the rule.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. There are no small entities in this regulated industry.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments, or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in the friction material manufacturing industry that would be affected by this action. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and IV.A and B of this preamble.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. Therefore, the EPA conducted a search to identify potentially applicable voluntary consensus standards. However, the Agency identified no such standards. Therefore, the EPA has decided to continue the use of the weighing procedures based on EPA Method 28 of 40 CFR part 60, appendix A (section 10.1) for weighing of recovered solvent. A thorough summary of the search conducted and results are included in the memorandum titled ''Voluntary Consensus Standard Results for Friction Materials Manufacturing Facilities Residual Risk and Technology Review,'' which is available in the docket for this action.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the technical report, ''Friction Materials Manufacturing Demographic Analysis,'' which is available in the docket for this action.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 20, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart QQQQQ—National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities

■ 2. Section 63.9495 is amended by revising paragraphs (a) and (b) and adding paragraph (e) to read as follows:

§ 63.9495 When do I have to comply with this subpart?

(a) If you have an existing solvent mixer, you must comply with each of the requirements for existing sources no later than October 18, 2005, except as otherwise specified at this section and §§ 63.9505, 63.9530, 63.9540, 63.9545, and Table 1 to this subpart.

(b) If you have a new or reconstructed solvent mixer for which construction or reconstruction commenced after October 18, 2002, but before May 4, 2018, you must comply with the requirements for new and reconstructed sources upon initial startup, except as otherwise specified at this section and §§ 63.9505, 63.9530, 63.9540, 63.9545, and Table 1 to this subpart.

* * * * *

(e) Solvent mixers constructed or reconstructed after May 3, 2018, must be in compliance with this subpart at startup or by February 8, 2019, whichever is later.

■ 3. Revise § 63.9505 to read as follows:

§ 63.9505 What are my general requirements for complying with this subpart?

(a) Before August 7, 2019, for each existing source and each new or reconstructed source for which construction or reconstruction commenced after October 18, 2002, but

before May 4, 2018, you must be in compliance with the emission limitations in this subpart at all times, except during periods of startup, shutdown, or malfunction. On and after August 7, 2019, for each such source you must be in compliance with the emission limitations in this subpart at all times. For new and reconstructed sources for which construction or reconstruction commenced after May 3, 2018, you must be in compliance with the emissions limitations in this subpart at all times.

(b) Before August 7, 2019, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced after October 18, 2002, but before May 4, 2018, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). On and after August 7, 2019 for each such source, and after February 8, 2019 for new and reconstructed sources for which construction or reconstruction commenced after May 3, 2018, at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(c) Before August 7, 2019, for each existing source, and for each new or reconstructed source for which construction commenced after October 18, 2002, but before May 4, 2018, you must develop a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). For each such source, a startup, shutdown, and malfunction plan is not required on and after August 7, 2019. No startup, shutdown, and malfunction plan is required for any new or reconstructed source for which construction or reconstruction commenced after May 3, 2018.

■ 4. Section 63.9530 is amended by revising paragraphs (a)(1) and (e) to read as follows:

§ 63.9530 How do I demonstrate continuous compliance with the emission limitation that applies to me?

(a) * * *

(1) For existing sources and for new or reconstructed sources for which construction or reconstruction commenced after October 18, 2002, but before May 4, 2018, before August 7, 2019, except for during malfunctions of your weight measurement device and associated repairs, you must collect and record the information required in § 63.9520(a)(1) through (8) at all times that the affected source is operating and record all information needed to document conformance with these requirements. On and after August 7, 2019 for such sources, and after February 8, 2019 for new or reconstructed sources that commenced construction after May 3, 2018, you must collect and record the information required in § 63.9520(a)(1) through (8) at all times that the affected source is operating and record all information needed to document conformance with these requirements.

* * * * *

(e) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after October 18, 2002, but before May 4, 2018, before August 7, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e). On and after August 7, 2019 for such sources, and after February 8, 2019 for new or reconstructed sources which commence construction or reconstruction after May 3, 2018, all deviations are considered violations.

■ 5. Section 63.9540 is amended by revising paragraphs (b)(4), (c)(2), and (d) to read as follows:

§ 63.9540 What reports must I submit and when?

* * * * *

(b) * * *

(4) For existing sources and for new or reconstructed sources for which construction or reconstruction commenced after October 18, 2002, but before May 4, 2018, before August 7, 2019, if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i). A startup, shutdown, and malfunction plan is not required for such sources on and after August 7, 2019.

* * * * *

(c) * * *

(2) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after October 18, 2002, but before May 4, 2018, before August 7, 2019, information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. On and after August 7, 2019 for such sources, and after February 8, 2019 for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018, information on the number of deviations to meet an emission limitation. For each instance, include the date, time, duration, and cause of deviations (including unknown cause, if applicable), as applicable, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, and the corrective action taken.

(d) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after October 18, 2002, but before May 4, 2018, before August 7, 2019, if you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in § 63.10(d)(5)(ii). An immediate startup, shutdown, and malfunction report is not required for such sources on and after August 7, 2019.

* * * * *

■ 6. Section 63.9545 is amended by revising paragraph (a)(2) and adding paragraph (a)(3) to read as follows:

§ 63.9545 What records must I keep?

(a) * * *

(2) For existing sources and for new or reconstructed sources which commenced construction or reconstruction after October 18, 2002, but before May 4, 2018, before August 7, 2019, the records in § 63.6(e)(3)(iii)

through (v) related to startup, shutdown, or malfunction. For such sources, it is not required to keep records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, or malfunction on and after August 7, 2019.

(3) After February 8, 2019 for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018, and on and after August 7, 2019 for all other affected sources, in the event that an affected unit fails to meet an applicable standard, record the number of deviations. For each deviation, record the date, time and duration of each deviation.

(i) For each deviation, record and retain cause of deviations (including unknown cause, if applicable), a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(ii) Record actions taken to minimize emissions in accordance with § 63.9505, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

* * * * *

■ 7. Table 1 to subpart QQQQQ of part 63 is amended by:

■ a. Removing the entry ''§ 63.6(a)–(c), (e)–(f), (i)–(j)'';

■ b. Adding the entries ''§ 63.6(a)–(c), (i)–(j)'', ''§ 63.6(e)(1)(i)–(ii)'', ''§ 63.6(e)(1)(iii), (e)(2)'', ''§ 63.6(e)(3)'', ''§ 63.6(f)(1)'', and ''§ 63.6(f)(2)–(3)'' in numerical order;

■ c. Removing the entry ''§ 63.8(a)(1)–(2), (b), (c)(1)–(3), (f)(1)–(5)'';

■ d. Adding the entries ''§ 63.8(a)(1)–(2)'', ''§ 63.8(b)'', ''§ 63.8(c)(1)(i), (iii)'', ''§ 63.8(c)(1)(ii), (c)(2), (c)(3)'', and ''§ 63.8(f)(1)–(5)'' in numerical order;

■ e. Removing the entry ''§ 63.10(a), (b), (d)(1), (d)(4)–(5), (e)(3), (f)''; and

■ f. Adding the entries ''§ 63.10(a), (b)(1), (d)(1), (d)(4), (e)(3), (f)'', ''§ 63.10(b)(2)(i), (ii), (iv), (v)'', ''§ 63.10(b)(2)(iii), (vi)–(xiv)'', and ''§ 63.10(d)(5)'' in numerical order.

The revisions and additions read as follows:

TABLE 1 TO SUBPART QQQQQ OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART QQQQQ

* * * * * * *

Citation	Subject	Applies to subpart QQQQQ?	Explanation
*	*	*	*
§ 63.6(a)–(c), (i)–(j).	Compliance with Standards and Maintenance Requirements.	Yes.	
*	*	*	*
§ 63.6(e)(1)(i)–(ii)	SSM Operation and Maintenance Requirements.	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter.	Subpart QQQQQ requires affected units to meet emissions standards at all times. See § 63.9505 for general duty requirement.
§ 63.6(e)(1)(iii), (e)(2).	Operation and Maintenance.	Yes.	
§ 63.6(e)(3)	SSM Plan Requirements.	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter.	Subpart QQQQQ requires affected units to meet emissions standards at all times.
§ 63.6(f)(1)	SSM Exemption	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter.	Subpart QQQQQ requires affected units to meet emissions standards at all times.
§ 63.6(f)(2)–(3) ..	Compliance with Nonopacity Emission Standards.	Yes.	
*	*	*	*
§ 63.8(a)(1)–(2)	Applicability and Relevant Standards for CMS.	Yes.	
*	*	*	*
§ 63.8(b)	Conduct of Monitoring.	Yes.	
§ 63.8(c)(1)(i), (iii).	Continuous Monitoring System (CMS) SSM Requirements.	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter..	
§ 63.8(c)(1)(ii), (c)(2), (c)(3).	CMS Repairs, Operating Parameters, and Performance Tests.	Yes.	
*	*	*	*
§ 63.8(f)(1)–(5) ..	Alternative Monitoring Procedure.	Yes.	

TABLE 1 TO SUBPART QQQQQ OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART QQQQQ—Continued

Citation	Subject	Applies to subpart QQQQQ?	Explanation
*	*	* * * * *	*
§ 63.10(a), (b)(1), (d)(1), (d)(4), (e)(3), (f).	Recordkeeping and Reporting Requirements.	Yes.	
*	*	* * * * *	*
§ 63.10(b)(2)(i), (ii), (iv), (v).	Recordkeeping for Startup, Shutdown and Malfunction.	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter.	See § 63.9545 for recordkeeping requirements.
§ 63.10(b)(2)(iii), (vi)–(xiv).	Owner/Operator Recordkeeping Requirements.	Yes.	
*	*	* * * * *	*
§ 63.10(d)(5)	SSM reports	No, for new or reconstructed sources which commenced construction or reconstruction after May 3, 2018. Yes, for all other affected sources before August 7, 2019, and No thereafter.	See § 63.9540 for malfunction reporting requirements.
*	*	* * * * *	*

[FR Doc. 2019–00786 Filed 2–7–19; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 0, 1, 5, 73, and 74

[MB Docket No. 18–121; FCC 18–174]

Posting of Station Licenses and Related Information

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (FCC or Commission) eliminates provisions of our rules that require broadcasters to post and maintain copies of their licenses and related information in specific locations. These rules have become redundant and obsolete now that licensing information is readily accessible online through the Commission's databases, including CDBS, LMS, and ULS. It therefore finds that eliminating these rules, which apply in some form to all broadcast licensees, will serve the public interest.

DATES: Effective February 8, 2019.

FOR FURTHER INFORMATION CONTACT: For additional information, contact Jonathan Mark, *Jonathan.Mark@fcc.gov,* of the Media Bureau, Policy Division, (202) 418–3634. Direct press inquiries to Janice Wise at (202) 418–8165.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order (*Order*), FCC 18–174, adopted December 10, 2018 and released on December 11, 2018. The full text of this document is available electronically via the FCC's Electronic Document Management System (EDOCS) website at *http://fjallfoss.fcc.gov/edocs_public/* or via the FCC's Electronic Comment Filing System (ECFS) website at *http://fjallfoss.fcc.gov/ecfs2/.* (Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.) This document is also available for public inspection and copying during regular business hours in the FCC Reference Information Center, which is located in Room CY–A257 at FCC Headquarters, 445 12th Street SW, Washington, DC 20554. The Reference Information Center is open to the public Monday through Thursday from 8:00 a.m. to 4:30 p.m. and Friday from 8:00 a.m. to 11:30 a.m. The complete text may be purchased from the Commission's copy contractor, 445 12th Street, SW, Room CY–B402, Washington, DC 20554. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an email to *fcc504@fcc.gov* or calling the Commission's Consumer and Governmental Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (TTY).

Synopsis

I. Report and Order

1. In this Report and Order (*Order*), we eliminate the provisions in parts 1, 5, 73 and 74 of our rules that require the posting and maintenance of broadcast licenses and related information in specific locations.[1] In May 2018, the Federal Communications Commission (Commission) issued a Notice of Proposed Rulemaking (*NPRM*) (83 FR 30901) seeking comment on whether to eliminate license posting rules that appeared to be redundant and obsolete now that licensing information is readily accessible online through the Commission's databases. Commenters in this proceeding unanimously support the elimination of these rules. As detailed below, we find that eliminating these requirements, which apply in some form to all broadcast licensees, will serve the public interest. In doing so, we advance the Commission's goal of modernizing our media rules and remove unnecessary regulatory burdens that impede competition and innovation in the media marketplace.

2. Broadcast license posting rules predate the establishment of the Commission. As explained in the *NPRM,* the Federal Radio Commission promulgated the earliest iteration of broadcast license posting requirements on record in 1930. Subsequent Commission decisions revised and

[1] By this Order, we also eliminate provisions in our rules which reference or cross-reference broadcast license posting rules.

DEPARTMENT OF DEFENSE

Office of the Secretary

32 CFR Part 110

[Docket ID: DOD–2018–OS–0046]

RIN 0790–AK32

Standard Rates of Subsistence Allowance and Commutation Instead of Uniforms for Members of the Senior Reserve Officers' Training Corps

AGENCY: Office of the Under Secretary for Personnel and Readiness, DoD.

ACTION: Final rule.

SUMMARY: This final rule removes DoD's regulation which provides internal processes and accounting information in order to provide subsistence and commutation instead of uniforms to members of Senior Reserve Officers' Training Corps (ROTC) programs located at eligible colleges and universities. Examples of eligible colleges and universities include The Citadel and Virginia Military Institute where students wear a uniform prescribed by the institution instead of Service-specific uniforms.

DATES: This rule is effective on February 28, 2019.

FOR FURTHER INFORMATION CONTACT: LTCOL Naomi Y. Henigin, 703–695–5529.

SUPPLEMENTARY INFORMATION: It has been determined that publication of this CFR part removal for public comment is impracticable, unnecessary, and contrary to public interest since it is based on removing DoD internal policies and procedures that are publicly available on the Department's issuance website. DoD internal guidance concerning subsistence and commutation to members of Senior ROTC programs located at eligible colleges and universities will continue to be published in DoD Instruction 1215.08, ''Senior Reserve Officers' Training Corps (ROTC) Programs,'' available at *https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/121508p.pdf?ver=2019-01-29-121836-737.*

This rule is not significant under Executive Order (E.O.) 12866, ''Regulatory Planning and Review,'' therefore, E.O. 13771, ''Reducing Regulation and Controlling Regulatory Costs'' does not apply.

List of Subjects in 32 CFR Part 110

Armed forces reserves, Colleges and universities. Reporting and recordkeeping requirements. Wages.

PART 110—[REMOVED]

■ Accordingly, by the authority of 5 U.S.C. 301, 32 CFR part 110 is removed.

Dated: February 25, 2019.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2019–03517 Filed 2–27–19; 8:45 am]

BILLING CODE 5001–06–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2004–0309; FRL–9988–79–OAR]

RIN 2060–AT47

National Emission Standards for Hazardous Air Pollutants: Wet-Formed Fiberglass Mat Production Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Wet-Formed Fiberglass Mat Production source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing startup, shutdown, and malfunction (SSM), electronic reporting, and clarification of rule provisions. These final amendments address emissions during periods of SSM; add electronic reporting; revise certain monitoring, recordkeeping, and reporting requirements; and include other miscellaneous technical and editorial changes. These final amendments will result in improved compliance and implementation of the rule.

DATES: This final rule is effective on February 28, 2019. The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the Federal Register as of February 28, 2019.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2004–0309. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Keith Barnett, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–5605; fax number: (919) 541–4991; and email address: *barnett.keith@epa.gov.* For specific information regarding the risk modeling methodology, contact Ted Palma, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–5470; fax number: (919) 541–0840; and email address: *palma.ted@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, U.S. EPA Region 5 (Mail Code E–19J), 77 West Jackson Boulevard, Chicago, Illinois 60604; telephone number: (312) 353–6266; and email address: *ayres.sara@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA Clean Air Act
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
CFR Code of Federal Regulations
EPA Environmental Protection Agency
ERT Electronic Reporting Tool
HAP hazardous air pollutant(s)
HI hazard index
HQ hazard quotient
IBR incorporation by reference
ICR information collection request
km kilometer
MACT maximum achievable control technology

MIR maximum individual risk
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NRDC Natural Resources Defense Council
NTTAA National Technology Transfer and Advancement Act
OMB Office of Management and Budget
OSHA Office of Safety and Health Administration
PRA Paperwork Reduction Act
REL reference exposure level
RFA Regulatory Flexibility Act
RTR residual risk and technology review
SDS safety data sheet
SSM startup, shutdown, and malfunction
the Court United States Court of Appeals for the District of Columbia Circuit
TOSHI target organ-specific hazard index
tpy tons per year
UMRA Unfunded Mandates Reform Act
VCS voluntary consensus standards

Background information. On April 6, 2018, the EPA proposed revisions to the Wet-Formed Fiberglass Mat Production NESHAP based on our RTR (83 FR 14997). In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments is available in ''Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,'' Docket ID No. EPA–HQ–OAR–2004–0309. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source category	NAICS code [1]
Wet-Formed Fiberglass Mat Production	327212

[1] North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://www.epa.gov/stationary-sources-air-pollution/wet-formed-fiberglass-mat-production-national-emission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by April

29, 2019. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3); *National Lime Ass'n* v. *EPA,* 233 F.3d 625, 640 (D.C. Cir. 2000). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 83 FR 14984, April 6, 2018.

B. What is the Wet-Formed Fiberglass Mat Production source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA promulgated the Wet-Formed Fiberglass Mat Production NESHAP on April 11, 2002 (67 FR 17824). The standards are codified at 40 CFR part 63, subpart HHHH. The Wet-Formed Fiberglass Mat Production industry consists of facilities that use formaldehyde-based resins to bond glass fibers together to make wet-formed fiberglass mat, which can be used as a substrate for multiple roofing products, as reinforcement for various plastic, cement, and gypsum products, and in miscellaneous specialty products. Methanol is also present in some, but not all, resins used to produce wet-formed fiberglass mat. In a typical wet-formed fiberglass mat production line, glass fibers are mixed with water and emulsifiers in large mixing vats to form a slurry of fibers and water. The glass fiber slurry is then pumped to a mat forming machine, where it is dispensed in a uniform curtain over a moving screen belt. The mat is then carried beneath a binder saturator, where binder solution is uniformly applied onto the surface of the mat. This resin-binder application process includes the screen passing over a vacuum, which draws away the excess binder solution for recycling. The mat of fibers and binder then passes into drying and curing ovens that use heated air to remove excess moisture and harden (*i.e.,* cure) the binder. Upon exiting the ovens, the mat is cooled, trimmed, wound, and packaged to product specifications. The primary HAP emitted during production of wet-formed fiberglass mat is formaldehyde, which is classified as a probable human carcinogen; and methanol, which is not classified as a carcinogen. The source category covered by this MACT standard currently includes seven facilities.

The affected source is each wet-formed fiberglass mat drying and curing oven. The NESHAP regulates emissions

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

of HAP through emission standards for formaldehyde, which is also used as a surrogate for total HAP emissions. Facilities subject to the NESHAP must meet either a mass emission limit or percentage reduction requirement for each drying and curing oven. The emission standards are the same for new and existing drying and curing ovens. The emission limits for the exhaust from new and existing drying and curing ovens are: (1) A maximum formaldehyde emission rate of 0.03 kilograms per megagram of wet-formed fiberglass mat produced (0.05 pounds per ton of wet-formed fiberglass mat produced) or (2) a minimum of 96-percent destruction efficiency of formaldehyde. Thermal oxidizers are used by facilities subject to the NESHAP to control their drying and curing oven exhausts.

C. What changes did we propose for the Wet-Formed Fiberglass Mat Production source category in our April 6, 2018, proposal?

On April 6, 2018, the EPA published a proposed rule in the **Federal Register** for the Wet-Formed Fiberglass Mat Production NESHAP, that took into consideration the RTR analyses (83 FR 14997, April 6, 2018). Based on the residual risk analysis, we proposed that risks from the source category are acceptable, that the NESHAP provides an ample margin of safety to protect public health, and that a more stringent standard is not necessary to prevent an adverse environmental effect. Accordingly, we did not propose revisions to the numerical emission limits based on our residual risk analysis. Based on the technology review, we proposed that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. Accordingly, we did not propose any changes under the technology review. In addition, we proposed amendments to the SSM provisions and revisions to monitoring, recordkeeping, and reporting requirements in the following three ways: (1) Performance test results would be submitted electronically; (2) compliance reports would be submitted semiannually when deviations from applicable standards occur; and (3) parameter monitoring would no longer be required during periods when a non-HAP binder is being used. We also proposed miscellaneous technical and editorial changes.

III. What is included in this final rule?

This action finalizes the EPA's determinations for the Wet-Formed Fiberglass Mat Production source category pursuant to CAA sections 112(d)(6) and (f)(2). This action also finalizes other changes to the NESHAP, including amendments to the SSM provisions and a change to the proposed definition of ''shutdown'' to reflect comments we received on the proposal. Other changes include revisions to monitoring, recordkeeping, and reporting requirements to require electronic submittal of performance test report results; submittal of semiannual compliance reports for when deviations from applicable standards occur; and removal of parameter monitoring and performance testing requirements during periods when a non-HAP binder is being used. We are also finalizing miscellaneous technical and editorial changes that we proposed in April 2018. This action also reflects several changes to certain aspects of the April 2018 proposal that are in response to comments received during the public comment period. These changes are described in section IV of this preamble.

A. What are the final rule amendments based on the risk review for the Wet-Formed Fiberglass Mat Production source category?

This section introduces the final amendments to the Wet-Formed Fiberglass Mat Production NESHAP being promulgated pursuant to CAA section 112(f). As proposed, we are finalizing our finding that risks remaining after implementation of the existing MACT standards for this source category are acceptable. Also as proposed, we are finalizing the determination that the current NESHAP provides an ample margin of safety to protect public health. Therefore, we are not finalizing any revisions to the numerical emission limits based on these analyses conducted under CAA section 112(f).

B. What are the final rule amendments based on the technology review for the Wet-Formed Fiberglass Mat Production source category?

We determined that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. Therefore, we are not finalizing revisions to the MACT standards under CAA section 112(d)(6).

C. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?

We are finalizing proposed amendments to the Wet-Formed Fiberglass Mat Production NESHAP to remove and revise provisions related to SSM. In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously.

As proposed, we have eliminated the SSM exemption, which is contained in 40 CFR 63.2986(g)(1). Consistent with *Sierra Club* v. *EPA,* the EPA has established standards in this rule that apply at all times. As explained at proposal, we have also revised Table 2 to 40 CFR part 63, subpart HHHH (the General Provisions applicability table), in several respects. For example, we have eliminated the incorporation of the General Provisions' requirement for a source to develop an SSM plan. We have also eliminated and revised certain recordkeeping and reporting requirements that are related to the SSM exemption as described in detail in the proposed rule and summarized again here.

In establishing the standards in this rule, the EPA has taken into account periods of startup and shutdown and, for the reasons explained in the April 2018 proposal and below, has not established alternate standards for those periods.

As explained at proposal, periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. As also explained at proposal, because thermal oxidizer controls are employed during all periods that a drying and curing oven is processing binder-infused fiberglass mat, there is no need to establish separate formaldehyde standards for periods of startup and shutdown (83 FR 14998). We did, however, propose definitions of startup and shutdown for purposes of this subpart. The proposed definitions clarified that it is not the setting in and cessation of operation of the drying and curing oven (*i.e.,* affected source) that accurately define startup and shutdown, but, rather, the setting in and cessation of operation of the drying and curing of any binder-infused fiberglass mat. We also explained that it is this binder-infused fiberglass mat, not the ovens themselves, that emit HAP. Therefore, we found that it was appropriate to establish definitions for startup and shutdown based on the setting in and

cessation of operation of the drying and curing oven. Further, in response to comments on our proposal, we have made minor clarifications to the definition of shutdown in the final rule in order to account for the residence time of the binder-infused fiberglass mat in the oven, and to aid facilities in establishing periods of shutdown when emissions from the drying oven cease. We have also revised definitions for startup and shutdown to consistently refer to the material being processed as ''binder-infused fiberglass mat.'' Finally, we have added a definition of ''maximum residence time'' to 40 CFR 63.3004 and a formula that facilities must use to determine the maximum residence time for each production line.

This reflects the Agency's response to comments received on our proposal that indicated shutdown would end when the maximum residence time has elapsed after binder-infused fiberglass mat is no longer entering the oven. Typically, residence times are of short duration for wet-formed fiberglass mat lines, and are on the order of less than 10 seconds to less than 1 minute. The maximum residence time is the longest time that a particular point on the fiberglass mat could remain in the drying and curing oven, and is based on the length of the drying and curing oven and the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup. Air pollution controls continue to operate through shutdown, and all emissions from the ovens continue to be routed to the air pollution control equipment until shutdown is completed.

With regard to malfunctions, the EPA did not propose separate standards for periods of malfunction. At proposal, we explained our interpretation of CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards. We noted that this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016). The EPA further explained that, ''although no statutory language compels EPA to set standards for malfunctions, EPA has the discretion to do so where feasible. EPA will consider whether circumstances warrant setting standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions'' (83 FR 14999).

The EPA is not finalizing separate standards for periods of malfunction. While we requested comment for work practice standards during periods of malfunction, and received some information in support of such standards, we did not receive sufficient information on which to base a malfunction standard.

As further explained at proposal, ''[i]n the event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventive and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable and was not instead caused in part by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction). If the EPA determines in a particular case that an enforcement action against a source for violation of an emission standard is warranted, the source can raise any and all defenses in that enforcement action and the Federal District Court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate'' (83 FR 14999).

The following aspects for the SSM provisions are being finalized as proposed, with minor corrections and clarifications.

1. 40 CFR 63.2986 General Duty

As discussed at proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(1)(i) by changing the ''yes'' in column 3 to a ''no.'' At proposal, we explained that 40 CFR 63.6(e)(1)(i) describes the general duty to minimize emissions and contains language that we consider no longer necessary or appropriate in light of the elimination of the SSM exemption. We proposed adding general duty regulatory text at 40 CFR 63.2986(g) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. We further explained that the current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM, and that with the elimination of the SSM exemption, there would be no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA proposed for 40 CFR 63.2986(g) did not include that language from 40 CFR 63.6(e)(1). These revisions are being finalized as proposed, with the exception of minor grammatical corrections and clarifications.

Consistent with our proposal, we are also revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(1)(ii) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, 40 CFR 63.6(e)(1)(ii) imposes requirements that are either not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.2986.

2. SSM Plan

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(3) by changing the ''yes'' in column 3 to a ''no.'' Generally, these paragraphs require development of an SSM plan and specify recordkeeping and reporting requirements related to the SSM plan. As noted at proposal, the EPA is removing the SSM exemption. Therefore, affected units will be subject to an emission standard during such events. We believe that the applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and, thus, the SSM plan requirements are no longer necessary.

3. Compliance with Standards

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(f)(1) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, the current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club,* the EPA is revising standards in this rule to apply at all times. This change means that sources would no longer be exempt from nonopacity standards during periods of SSM.

4. 40 CFR 63.2992 Performance Testing

Consistent with our proposal, we are revising the General Provisions table

(Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.7(e)(1) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, 40 CFR 63.7(e)(1) describes performance testing requirements and, in order to reflect the removal of the SSM exemption, the EPA proposed adding performance testing requirements at 40 CFR 63.2992(e). The revised regulatory text does not include the language in 40 CFR 63.7(e)(1) that restates the SSM exemption and language that precluded startup and shutdown periods from being considered ''representative'' for purposes of performance testing and the revised performance testing provisions exclude periods of startup and shutdown. Similar to 40 CFR 63.7(e)(1), the revisions to 40 CFR 63.2992(e) specify that performance tests conducted under this subpart should not be conducted during malfunctions; as noted at proposal, conditions during malfunctions are often not representative of normal operating conditions. We also proposed adding language that would require the owner or operator to record both the process information that is necessary to document operating conditions during performance testing and an explanation to support that such conditions represent normal operation. We explained that 40 CFR 63.7(e) requires that the owner or operator make available to the Administrator such records ''as may be necessary to determine the condition of the performance test'' available to the Administrator upon request, but does not specifically require the information to be recorded. We further explained that the regulatory text the EPA is adding to this provision builds on that requirement and makes explicit the requirement to record the information. These revisions are being finalized as proposed, with the exception of minor grammatical corrections and clarifications.

5. Monitoring

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.8(c)(1)(i) and (iii) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.8(d)(3) by changing the ''yes'' in column 3 to a ''no.'' At proposal, we had explained that the final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement that is no longer applicable. The EPA also proposed adding text in 40 CFR 63.2994(a)(2) that is identical to 40 CFR 63.8(d)(3) except that the final sentence would be replaced with the following sentence: ''You should include the program of corrective action in the plan required under § 63.8(d)(2).''

6. 40 CFR 63.2998 Recordkeeping

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(i) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, 40 CFR 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recordkeeping provisions are no longer necessary with the removal of the SSM exemption, and, instead, the EPA is extending the requirements for recordkeeping and reporting under normal operations to startup and shutdown. As also previously explained in response to comments, we have revised the definition of shutdown in order to account for the residence time of the binder-infused fiberglass mat in the oven to help sources establish periods of shutdown and to determine when HAP emissions from ovens would cease. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, additional recordkeeping for startup and shutdown periods is now limited to records used to establish the maximum residence time that any binder-infused fiberglass mat would remain in the drying and curing oven and to determine the time of shutdown. As discussed in section III.C of this preamble, shutdown ends when the maximum residence time has elapsed after binder infused fiberglass mat is no longer entering the oven. The maximum residence time must be determined for each production line. Typically, residence times are very short for wet-formed fiberglass mat lines, on the order of less than 10 seconds to less than 1 minute. Therefore, we are also requiring facilities to maintain records showing how the maximum residence time was derived for each line.

Consistent with our proposal, we are also revising the General Provisions table (Table 2 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(ii) by changing the ''yes'' in column 3 to a ''no.'' At proposal, we explained that 40 CFR 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction and we proposed adding the same requirements to 40 CFR 63.2998(g). We noted, however, that the proposed regulatory text differs from the General Provisions given that 40 CFR 63.10(b)(2)(ii) requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. Instead, we proposed recordkeeping requirements for any failure to meet an applicable standard and also proposed requiring that the source record the date, time, and duration of the failure rather than an ''occurrence.'' The EPA also proposed adding to 40 CFR 63.2998(g) a requirement that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. We also provided examples of such methods, which included product-loss calculations, mass-balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA further proposed requiring sources to keep records of information related to any failure to meet applicable standards in order to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that documents how the source met the general duty requirement to minimize emissions when the source failed to meet an applicable standard.

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(iv) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, when applicable, this provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. This requirement is no longer appropriate because SSM plans will no longer be required. We further explained that the requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions would now be applicable by reference to 40 CFR 63.2988(g).

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart

HHHH) entry for 40 CFR 63.10(b)(2)(v) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, when applicable, this provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. As further explained, the requirement is no longer appropriate because SSM plans will no longer be required.

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(c)(15) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, with the elimination of the SSM exemption, 40 CFR 63.10(c)(15), which allows an owner or operator to either use the affected source's SSM plan or keep records to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), and the requirements of 40 CFR 63.10(c)(10) through (12), is now superfluous. Consistent with our proposal, the EPA is eliminating this requirement because SSM plans are no longer required.

7. 40 CFR 63.3000 Reporting

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(d)(5) by changing the ''yes'' in column 3 to a ''no.'' As explained at proposal, 40 CFR 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA proposed adding reporting requirements to 40 CFR 63.3000(c). We explained that the replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. Subject to the correction described below, we are promulgating language requiring sources that fail to meet an applicable standard at any time to report the relevant information concerning such events in a compliance report. Compliance reporting on a quarterly basis is currently required under the existing NESHAP. We are changing this reporting period from a quarterly (four times a year) to a semiannual (twice a year) basis, as discussed further below. We are also correcting an error that occurred at publication of the proposed rule where the published rule text inadvertantly included the same proposed revisions for both 40 CFR 63.3000(c)(5) and (6), and did not read as explained in the proposal (83 FR 15000). These provisions specify the content requirements for semiannual compliance reports before and after the compliance date for this final rule. We did not receive any comments on the proposed language for these provisions. We are correcting 40 CFR 63.3000(c)(5) by including the correct language, which specifies that the content requirements of semiannual compliance reports prior to the compliance date for this final rule would include the existing rule requirements. We are also correcting 40 CFR 63.3000(c)(6) to indicate that after the compliance date for this rule, the report must contain the number, date, time, duration, and the cause of such events (including whether the cause is unknown, if applicable), a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. As previously explained, examples of such methods include product-loss calculations, mass-balance calculations, direct measurements, or engineering judgment based on known process parameters. It also includes calculations for maximum residence time to reflect revisions being made in the final rule in response to comments on the proposed definition of shutdown. The EPA is promulgating this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty requirement to minimize emissions during a failure to meet an applicable standard.

As also proposed, we will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because, as previously discussed, such plans are no longer required. The final amendments, therefore, specify in 40 CFR 63.3000(d) that the SSM reports (required by 40 CFR 63.10(d)(5)) are no longer required after the compliance dates for this rule. Malfunction events will be reported in otherwise required reports having similar format and submittal requirements, so these reporting specifications are unnecessary and are being removed.

8. Definitions

We are promulgating definitions of ''Startup,'' ''Shutdown,'' and ''Maximum residence time'' in 40 CFR 63.3004. The current rule relies on the 40 CFR part 63, subpart A, definitions of startup and shutdown, which are based on the setting in operation, and cessation of operation, of the affected source (*i.e.,* drying and curing oven). As previously explained in the proposal (83 FR 15001) and in this section, the formaldehyde standards could only be exceeded during periods that fiberglass mat is being dried and cured in the oven. As also previously explained, because the EPA is requiring standards in this rule to apply at all times, we are promulgating definitions of startup and shutdown based on these periods to clarify that it is the commencing of operation and cessation of operation of the drying and curing of binder-infused fiberglass mat, plus the maximum residence time of that mat in the oven, that defines shutdown for purposes of 40 CFR part 63, subpart HHHH. We are finalizing a defintion indicating that shutdown occurs when binder-infused fiberglass mat ceases to enter the oven, in addition to the maximum residence time that fiberglass mat remains in the oven, as determined for each production line. According to comments we received at proposal, once the maximum residence time has elapsed, the mat is cured and dried, and is not emitting any organic HAP; there are no emissions at this point. We have also added a definition for ''maximum residence time'' and a formula for how the residence time must be determined for each production line (*i.e.,* each drying and curing oven). We have described these changes in section III.C of this preamble, and made minor clarifications to definitions of both startup and shutdown in response to comments on our proposal, as described in section IV.C of this preamble.

For the reasons described in the preamble to the proposed rule, we are also finalizing the proposed definition of ''Deviation'' in 40 CFR 63.3004 to remove language that differentiates between normal operations, startup and shutdown, and malfunction events. We received no comments on the proposed changes. The final rule also corrects a publication error in the proposed rule. The proposed rule, as published, incorrectly included two different definitions of ''Deviation.'' The final rule provides definitions of ''Deviation'' both prior to and after the compliance dates for this final rule. Specifically, prior to the compliance dates for this rule, deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard; (2) fails to meet any term or condition that is adopted to implement an applicable requirement in the subpart and that is

included in the operating permit for any affected source required to obtain such a permit; or (3) fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by the subpart.

After the compliance dates for this rule, deviation means any instance in which an affected source subject to the subpart, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard or (2) fails to meet any term or condition that is adopted to implement an applicable requirement in the subpart and that is included in the operating permit for any affected source required to obtain such a permit.

D. What other changes have been made to the NESHAP?

The EPA is promulgating revisions to monitoring, recordkeeping, and reporting requirements for this NESHAP in the following three ways: (1) Performance test results would be submitted electronically; (2) compliance reports would be submitted semiannually when deviations from applicable standards occur; and (3) parametric monitoring would no longer be required during periods when a non-HAP binder is being used. These provisions are being finalized as proposed, with minor corrections and clarifications.

Additionally, we proposed to reduce parametric monitoring and recording for facilities using non-HAP binders and solicited comment on exempting performance testing for such facilities. Consistent with our proposal, we are adopting the parametric monitoring exemption for facilities using non-HAP binders, as discussed in section III.D.2 of this preamble). Based on a review of comments received, we are also finalizing an exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders, which is discussed in section III.D.3 of this preamble. We are also finalizing several clarifying revisions to the rule, such as requirements for submittal of performance test data, which is discussed in section III.F of this preamble. The requirements for submittal of semiannual compliance reports, parametric monitoring requirements for facilities using non-HAP binders, exemption of performance testing requirements for facilities that are limited to the use of only non-HAP binders, and technical and editorial clarifications are discussed below in this section.

1. Frequency of Compliance Reports

The EPA is revising 40 CFR 63.3000(c) to require that compliance reports be submitted on a semiannual basis in all instances, with minor changes from proposal. Reporting on a semiannual basis will adequately provide a check on the operation and maintenance of process, control, and monitoring equipment and identify any problems with complying with rule requirements. The final rule specifies when facilities must begin transitioning from quarterly to semiannual reporting for deviations.

2. Parametric Monitoring and Recording During Use of Binder Containing No HAP

The EPA is promulgating the provision that during periods when the binder formulation being used to produce mat does not contain any HAP (*i.e.,* formaldehyde or any other HAP listed under section 112(b) of the CAA), owners and operators will not be required to monitor or record any of the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, including control device parameters. For each of these periods, we are requiring that owners and operators record the dates and times that production of mat using a non-HAP binder began and ended. To clearly identify these periods when the binder formulation being used to produce mat does not contain any HAP, we are promulgating revisions to 40 CFR 63.2984, 63.2996, and 63.2998 and Table 1 to 40 CFR part 63, subpart HHHH, and also promulgating a definition of ''Non-HAP binder'' in 40 CFR 63.3004. As discussed in section IV.D of this preamble, we have revised the definition of ''Non-HAP binder'' from proposal to clarify that non-HAP binder must meet the Office of Safety and Health Administration (OSHA) Hazard Communication Standard's criteria for disclosing composition or ingredients in Section 3 of the safety data sheet (SDS), except when the manufacturer has withheld identifying information of the chemical. The affected source may not rely on a SDS for a non-HAP binder where the manufacturer withholds the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. In addition, the affected source may not withhold this information when making the case that a binder used is a non-HAP binder. See section IV.D of this preamble for additional information.

3. Exemption of Performance Testing for Facilities Subject to Federally Enforceable Permit Requirements

At proposal, the EPA solicited comment on the exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders (83 FR 15005). The EPA received supportive comments for this exemption. Thus, we are promulgating revisions to 40 CFR 63.2991 to provide that drying and curing ovens using exclusively non-HAP binders and that are subject to a federally enforceable permit limit for such non-HAP binders are not required to conduct periodic performance tests. This revision will reduce burden for owners and operators that have switched to using only non-HAP binders without any increase in HAP emissions. Owners and operators of drying and curing ovens that do not have a federally-enforceable permit limit and that are currently permitted to use HAP-containing binders will still be required to conduct periodic performance testing, even if they are not currently using binders that contain HAP.

4. Technical and Editorial Changes

We are finalizing several clarifying revisions to the final rule as described in Table 2 of this preamble.

TABLE 2—MISCELLANEOUS CHANGES TO 40 CFR PART 63, SUBPART HHHH

Section of subpart HHHH	Description of change
40 CFR 63.2984	• Amend paragraph (a)(4) to clarify compliance with a different operating limit means the operating limit specified in paragraph (a)(1). • Amend paragraph (e) to allow use of a more recent edition of the currently referenced ''Industrial Ventilation: A Manual of Recommended Practice,'' American Conference of Governmental Industrial Hygienists, *i.e.,* the appropriate chapters of ''*Industrial Ventilation: A Manual of Recommended Practice for Design*'' (27th edition), or an alternate as approved by the Administrator. • Revise text regarding IBR in paragraph (e) by replacing the reference to 40 CFR 63.3003 with, instead, 40 CFR 63.14.
40 CFR 63.2985	• Amend paragraphs (a) and (b) and add new paragraph (d) to clarify the compliance dates for provisions related to these amendments.
40 CFR 63.2993	• Correct paragraphs (a) and (b) to update a reference. • Re-designate paragraph (c) as paragraph (e) and amend the newly designated paragraph to clarify that EPA Method 320 (40 CFR part 63, appendix A) is an acceptable method for measuring the concentration of formaldehyde. • Add new paragraph (c) to clarify that EPA Methods 3 and 3A (40 CFR part 60, appendix A–2) are acceptable methods for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis. • Add new paragraph (d) to clarify that EPA Method 4 (40 CFR part 60, appendix A–3) is an acceptable method for measuring the moisture content of the stack gas.
40 CFR 63.2999	• Amend paragraph (b) to update the list of example electronic medium on which records may be kept. • Add paragraph (c) to clarify that any records that are submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format.
40 CFR 63.3003	• Remove text and reserve the section consistent with revisions to the IBR in 40 CFR 63.14.

E. What are the effective and compliance dates of the standards?

The revisions to the MACT standards being promulgated in this action are effective on February 28, 2019.

The compliance date for existing wet-formed fiberglass mat drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 is no later than 180 days after February 28, 2019. As we stated in the preamble to the proposed rule, we are allowing 180 days for owners and operators of such affected sources to comply with the rule, giving them time to read and understand the amended rule requirements; to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test electronic submission capabilities, and reliably employ electronic reporting; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule, and make any necessary adjustments; to adjust parameter monitoring and recording systems to accommodate revisions for periods of non-HAP binder use; and to update their operation, maintenance, and monitoring (OMM) plan to reflect the revised requirements. The compliance date for wet-formed fiberglass mat curing ovens constructed or reconstructed after April 6, 2018 is at startup or February 28, 2019, whichever is later.

F. What are the requirements for submission of performance test data to the EPA?

The EPA is finalizing the proposed requirement for owners and operators of wet-formed fiberglass mat production facilities to submit electronic copies of certain required performance test reports through EPA's Central Data Exchange (CDX) using the CEDRI. The final rule requires that performance test reports be submitted using the Electronic Reporting Tool (ERT). We are finalizing these requirements as proposed, with minor clarifications for the written notification of delayed reporting, as discussed in section IV.E of this preamble.

IV. What is the rationale for our final decisions and amendments for the Wet-Formed Fiberglass Mat Production source category?

For each issue, this section describes what we proposed and what we are finalizing for each issue, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

A. Residual Risk Review for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose pursuant to CAA section 112(f) for the Wet-Formed Fiberglass Mat Production source category?

Pursuant to CAA section 112(f), we conducted a risk review and presented the results for the review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the April 6, 2018, proposed rule for the Wet-Formed Fiberglass Mat Production source category (83 FR 14984). The results of the risk assessment are presented briefly in Table 3 of this preamble and in more detail in the residual risk document titled *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule,* which is in the docket for this action.

TABLE 3—WET-FORMED FIBERGLASS MAT PRODUCTION INHALATION RISK ASSESSMENT RESULTS IN THE APRIL 2018 PROPOSAL

Number of facilities [1]	Maximum individual cancer risk (in 1 million) [2]		Estimated population at increased risk of cancer ≥ 1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic non-cancer TOSHI [3]		Maximum screening acute non-cancer HQ [4]
	Based on actual emissions level [2]	Based on allowable emissions level	Based on actual emissions level [2]	Based on allowable emissions level	Based on actual emissions level [2]	Based on allowable emissions level	Based on actual emissions level	Based on allowable emissions level	Based on actual emissions level
7	0.8	1	0	60	0.0003	0.0009	0.006	0.009	HQ_{REL} = 0.6 (formaldehyde).

[1] Number of facilities evaluated in the risk analysis.
[2] Maximum individual excess lifetime cancer risk due to HAP emissions from the source category.
[3] Maximum target organ specific hazard index (TOSHI) value. The target organ with the highest TOSHI for the Wet-Formed Fiberglass Mat Production source category is the respiratory target organ.
[4] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of hazard quotient (HQ) values. HQ values shown use the lowest available acute threshold value, which in most cases is the reference exposure level (REL). When an HQ exceeds 1, we also show the HQ using the next lowest available acute dose-response value.

The results of the chronic inhalation cancer risk assessment, based on actual emissions, show the cancer maximum individual risk (MIR) posed by the seven facilities is less than 1-in-1 million, with formaldehyde as the major contributor to the risk. The total estimated cancer incidence from this source category is 0.0003 excess cancer cases per year, or one excess case every 3,000 years. There were no cancer risks above 1-in-1 million from HAP emitted from the seven facilities in this source category. The maximum chronic noncancer hazard index (HI) value for the source category could be up to 0.006 (respiratory) driven by emissions of formaldehyde. No one is exposed to TOSHI levels above 1.

We also evaluated the cancer risk at the maximum emissions allowed by the MACT standard, or ''MACT-allowable emissions.'' Risk results from the inhalation risk assessment using the MACT-allowable emissions indicate that the cancer MIR could be as high as 1-in-1 million with formaldehyde emissions driving the risks, and that the maximum chronic noncancer TOSHI value could be as high as 0.009 at the MACT-allowable emissions level with formaldehyde emissions driving the TOSHI. The total estimated cancer incidence from this source category considering allowable emissions is expected to be about 0.0009 excess cancer cases per year or one excess case every 1,000 years. Based on MACT-allowable emission rates, there were no cancer risks above 1-in-1 million.

Table 3 of this preamble indicates that for the Wet-Formed Fiberglass Mat Production source category, the maximum hazard quotient (HQ) is 0.6, driven by formaldehyde. We conducted a screening analysis of the worst-case acute HQ for every HAP that has an acute dose-response value (formaldehyde and methanol). Based on actual emissions, the highest screening acute HQ value was 0.6 (based on the acute reference exposure level (REL) for formaldehyde). The results showed that no HQ values exceeded 1. Because none of the screening HQ were greater than 1, further refinement of the estimates was not warranted.

An assessment of risk from facility-wide emissions was performed to provide context for the source category risks. The results of the facility-wide (both MACT and non-MACT sources, *i.e.,* sources at the facility that are not included in the Wet-Formed Fiberglass source category) assessment indicate that four of the seven facilities included in the analysis have a facility-wide cancer MIR greater than 1-in-1 million. The maximum facility-wide cancer MIR is 6-in-1 million, mainly driven by formaldehyde emissions from non-MACT sources. The total estimated cancer incidence from the seven facilities is 0.001 excess cancer cases per year, or one excess case every 1,000 years. Approximately 13,000 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources of the seven facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be less than 1 (at a respiratory HI of 0.5), mainly driven by emissions of acrylic acid and formaldehyde from sources at the facility that were not included in the Wet-Formed Fiberglass Production source category (non-MACT sources).

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and also at populations living within 50 km of the facilities, and we found that no one is exposed to a cancer risk at or above 1-in-1 million, or to a chronic noncancer TOSHI greater than 1. The methodology and the results of the demographic analysis are presented in a technical report titled, *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production,* which is available in the docket for this action.

We weighed all health risk factors in our risk acceptability determination, and we proposed that the residual risks from this source category are acceptable. We then considered whether the NESHAP provides an ample margin of safety to protect public health, and whether more stringent standards were necessary to prevent an adverse environmental effect, by taking into consideration costs, energy, safety, and other relevant factors. In determining whether the standards provide an ample margin of safety to protect public health, we examined the same risk factors that we investigated for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category. We proposed that the 2002 Wet-Formed Fiberglass Mat Production NESHAP requirements provide an ample margin of safety to protect public health. Based on the results of our environmental risk screening assessment, we also proposed that more stringent standards are not necessary to prevent an adverse environmental effect.

2. How did the risk review change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed.

3. What key comments did we receive on the risk review, and what are our responses?

We received comments in support of and against the proposed risk review and our determination that no revisions were warranted under CAA section 112(f)(2). Comments that were not supportive of the risk review were considered at length. After review of these comments, we determined that no changes needed to be made to the underlying risk assessment methodology. The comments and our specific responses can be found in the document titled ''Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,'' which is available in the docket for this action.

4. What is the rationale for our final approach and final decisions for the risk review?

We evaluated all of the comments on the EPA's risk review and determined that no changes to the review are needed. For the reasons explained in the proposed rule, we proposed that the risks from the Wet-Formed Fiberglass Mat Production source category are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, pursuant to CAA section 112(f)(2), we are finalizing our risk review as proposed.

B. Technology Review for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Wet-Formed Fiberglass Mat Production source category?

Pursuant to CAA section 112(d)(6), we conducted a technology review, which focused on identifying and evaluating developments in practices, processes, and control technologies for control of formaldehyde emissions from drying and curing ovens at wet-formed fiberglass mat production facilities. No cost-effective developments in practices, processes, or control technologies were identified in our technology review to warrant revisions to the standards. More information concerning our technology review is in the memorandum titled, *Section 112(d)(6) Technology Review for Wet-Formed Fiberglass Mat Production,* which is in the docket for this action, and in the preamble to the proposed rule (83 FR 14984).

2. How did the technology review change for the Wet-Formed Fiberglass Mat Production source category?

The technology review has not changed since proposal.

3. What key comments did we receive on the technology review, and what are our responses?

We received comments in support of the proposed determination from the technology review that no revisions were warranted under CAA section 112(d)(6). We also received one comment that asserted that cost effectiveness should not be a consideration when examining standards under CAA section 112(d)(6). We evaluated the comments and determined that no changes regarding our determination were needed. These comments and our specific responses can be found in the comment summary and response document titled ''Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,'' which is available in the docket for this action.

4. What is the rationale for our final approach for the technology review?

We evaluated all of the comments on the EPA's technology review and determined that no changes to the review are needed. For the reasons explained in the proposed rule, we determined that no cost-effective developments in practices, processes, or control technologies were identified in our technology review to warrant revisions to the standards. More information concerning our technology review, and how we evaluate cost effectiveness, can be found in the memorandum titled *Section 112(d)(6) Technology Review for Wet-Formed Fiberglass Mat Production,* which is in the docket for this action, and in the preamble to the proposed rule (83 FR 14984). Therefore, pursuant to CAA section 112(d)(6), we are finalizing our technology review as proposed.

C. Startup, Shutdown, and Malfunction for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed removing and revising provisions related to SSM that are not consistent with the requirement that standards apply at all times. More information concerning our proposal on SSM can be found in the proposed rule (83 FR 14984).

2. How did the SSM provisions change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, the SSM provisions have not changed, with the following exceptions. We have corrected a publication error in the proposed regulatory text for 40 CFR 63.3000(c)(5), as discussed in section III.C.7 of this preamble. We have also clarified the proposed definitions for ''startup'' and ''shutdown'' in the final rule to address a comment received that requested use of consistent terminology to refer to the material being processed, and for periods of shutdown, by associating it with the maximum residence time required for the curing and drying of mat in an oven and specifying the formula for calculation of maximum residence time. We have revised the definitions of ''Shutdown'' and ''Startup'' to read as set out in the regulatory text at the end of this document.

We have also added a definition for ''maximum residence time,'' which reflects the longest duration that binder-infused fiberglass mat would remain in the drying and curing oven and is determined based on the length of the drying and curing oven and the slowest line speed for the normal operation of an oven. The definition specifies a formula for the calculation of the maximum residence time as shown in the regulatory text at the end of this document.

3. What key comments did we receive on the SSM provisions, and what are our responses?

Comment: Although we did not propose standards for periods of malfunction, one commenter initially proposed that the Agency should promulgate work practice standards for malfunction events to address HAP emissions from binder-infused fiberglass mat that would remain in the oven during such events. In follow-up discussions of the potential implementation of the requested work practice standard with the EPA, the commenter requested that the EPA instead consider modifying the definition of ''shutdown.'' [2] The commenter asserted that the proposed definition of ''shutdown'' could be construed such that a shutdown period may continue for a period long after

[2] See letter from Reed B. Hitchcock, Asphalt Roofers Manufacturing Association to Susan Fairchild (EPA), ''Re: Risk and Technology Review, Wet-Formed Fiberglass Mat Production, 40 CFR part 63, subpart HHHH; Docket No. EPA–HQ–OAR–2004–0309; Proposed Modification to Definition of Shutdown,'' September 21, 2018, in the docket for this action.

binder-infused fiberglass mat has dried and emissions of organic HAP have ceased. According to the commenter, this would result in the potential for ''indefinite deviations.'' As an example, the commenter provided that a power failure could result in the prevention of mat leaving the oven even after the mat was cured and dried. The commenter further explained that wet-formed fiberglass mat lines operate at high speeds with relatively short residence times in the drying and curing oven (ranging from less than 10 seconds to less than 1 minute), during which the mat is completely dried and cured. Air pollution control devices are operated during shutdown, and all emissions from the curing and drying ovens are routed to these devices. The commenter requested that the EPA amend the final definition of ''shutdown'' to clarify that shutdown ends after mat ceases to enter the oven and following the elapse of the residence time. The requested amendments would account for the time period until the mat is completely cured and emissions from the binder-infused fiberglass mat are no longer occurring. The commenter also recommended that the EPA consider a definition for ''maximum residence time'' to clarify how facilities could calculate the maximum residence time for each drying and curing oven. The commenter also requested that the EPA revise the proposed definitions of ''startup'' and ''shutdown'' to use consistent terminology to refer to the material being processed. The commenter specifically requested that the EPA's proposed definition of ''shutdown'' be revised to replace the phrase ''any resin infused binder'' at the end of the definition with ''any binder-infused fiberglass mat.''

Response: We are finalizing the commenter's suggestions for clarification of the definitions of ''startup'' and ''shutdown,'' and the requested definition for ''maximum residence time.'' The EPA also agrees with commenters that the initially requested work practice standards are not appropriate for wet-formed fiberglass mat production operations, and consistent with proposal, is not finalizing any standards for malfunctions. We concur with the commenter's assessment that the binder-infused fiberglass mat entering the oven is cured over a relatively quick period (that may range from less than 10 seconds to less than 1 minute) and that this period of time (the ''residence time'') should be taken into account when determining the cessation of the operation period; for shutdown to complete, the binder infused fiberglass mat must enter and remain in the oven for the duration of the maximum residence time. When the maximum residence time is completed, no further emissions of HAP occur as a result of the wet-formed fiberglass mat manufacturing process. We are finalizing these suggested changes accordingly. We are finalizing provisions that the maximum residence time should be established as the longest time period (in seconds), during normal operation, that a particular point on the fiberglass mat remains in the oven, as determined by the length of the drying and curing oven (in feet), and the slowest line speed during normal operation (in feet per second), excluding periods of ramping up to speed during startup. This maximum residence time may then be used to determine the time of shutdown. See sections III.C and IV.C.2 of this preamble for additional information on the final definitions for ''startup,'' ''shutdown,'' and ''maximum residence time'' and determining the maximum residence time. We have also revised 40 CFR 63.2998 to include a requirement that facilities must maintain records that show how the maximum residence time was derived for each production line.

Additional comments on the SSM provisions and our specific responses to those comments can be found in the document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,* which is available in the docket for this action.

4. What is the rationale for our final approach for the SSM provisions?

We evaluated all of the comments on the EPA's proposed amendments to the SSM provisions. For the reasons explained in the proposed rule (83 FR 14984) and in section III.C of this preamble, we determined that these amendments remove and revise provisions related to SSM that are not consistent with the requirement that the standards apply at all times. Therefore, we are finalizing the amendments to remove and revise provisions related to SSM, as proposed, with the exception of clarifications to the definitions to ''startup'' and ''shutdown,'' and the addition of a final definition for ''maximum residence time,'' as discussed in this section.

D. Other Revisions To Monitoring, Performance Testing, and Reporting Requirements for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed several revisions to the rule's monitoring, recordkeeping, and reporting requirements, including revisions to the frequency of submittal of compliance reports, revisions to remove the requirement for parametric monitoring for drying and curing ovens where only a non-HAP binder is used, and technical and editorial revisions.

We proposed to revise the frequency of submittal of compliance reports when deviations from applicable standards occur. Currently, 40 CFR 63.3000(c) requires owners and operators of wet-formed fiberglass mat production facilities to submit compliance reports on a semiannual basis unless there are deviations from emission limits or operating limits. In those instances, the rule required that compliance reports be submitted on a quarterly basis. We proposed to revise 40 CFR 63.3000(c) to require that compliance reports be submitted on a semiannual basis in all instances.

We proposed revisions to 40 CFR 63.2984, 63.2996, and 63.2998 to revise requirements for owners and operators to monitor and record the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, during periods when a non-HAP binder is being used. We proposed that during periods when the binder formulation being used to produce mat does not contain any HAP (*i.e.,* formaldehyde or any other HAP listed under section 112(b) of the CAA), in lieu of monitoring or recording the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, owners and operators would be required to record the dates and times that production of mat using a non-HAP binder began and ended. We proposed harmonizing revisions to Table 1 to 40 CFR part 63, subpart HHHH, and a definition of ''Non-HAP binder'' to be added to 40 CFR 63.3004 to clearly identify periods when the binder formulation being used to produce mat does not contain any HAP. We also solicited comments on revising 40 CFR 63.2991 to exempt performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders.

We proposed several technical and editorial revisions to 40 CFR 63.2984, 63.2993, and 63.2999. We also removed

and reserved 40 CFR 63.3003. The proposed revisions included clarifying references, updates to acceptable reference methods that we are incorporating by reference, updates to clarify the format of records, and revisions for consistency with updates to the IBR in 40 CFR 63.14.

2. How did the revisions and corrections to monitoring, performance testing, and reporting requirements change for the Wet-Formed Fiberglass Mat Production source category?

Consistent with our proposal, we are revising the frequency of submittal of compliance reports when deviations from applicable standards occur from quarterly to semiannually. We are, however, promulgating these revisions with minor changes such as clarifying 40 CFR 63.3000(c)(1) to indicate the date when the transition to semiannual reporting should begin. We are also correcting a typographical error in the proposed introductory sentence of 40 CFR 63.3000(c)(6).

We are revising 40 CFR 63.2984, 63.2996, 63.2998, 63.3004 (definition of ''Non-HAP binder''), and Table 1 to 40 CFR part 63, subpart HHHH, to revise requirements for owners and operators to monitor and record the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, during periods when a non-HAP binder is being used, with minor revisions. We are revising Table 1 to 40 CFR part 63, subpart HHHH, to apply footnote ''4'' to line 1 (''Thermal oxidizer temperature'') and to line 2 (''Other process or control device parameters in your OMM plan''). Finally, we have revised the definition of ''Non-HAP binder'' from proposal to clarify that the binder must meet the OSHA Hazard Communication Standard, at 29 CFR 1910.1200(b), criteria for disclosing composition or ingredients in Section 3 of SDSs, except when identifying information is withheld. In such cases, an affected source may not rely on an SDS for a non-HAP binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. Additionally, an affected source may not withhold this information when making the case that a binder used is a non-HAP binder.

Since proposal, the technical and editorial revisions to 40 CFR 63.2984, 63.2993, 63.2999, and 63.3003 have not changed. We are, however, making minor revisions such as grammatical corrections or clarifications. For example, we are finalizing minor grammatical edits (such as converting passive voice to active voice) and clarifications that do not change the substantive content of the existing text. These changes are not based on comments on the proposed rule, but rather include minor edits to 40 CFR 63.2987(a), 63.2989(a), 63.2991(a), 63.2992(e), 63.2994(a)(2), 63.2996(a), 63.2997(a) and (b), 63.2998(c) and (g), 63.2999(c), and 63.3000(e) through (g). Based on comments to the proposed rule, we have also identified and implemented several additional technical and editorial revisions, as discussed in section IV.D.3 of this preamble.

3. What key comments did we receive on the proposed revisions to monitoring, performance testing, and reporting requirements for the Wet-Formed Fiberglass Mat Production source category, and what are our responses?

a. Frequency of Compliance Reporting

Comment: One commenter supported reducing the reporting frequency from quarterly to semiannually. This commenter requested that the EPA clarify 40 CFR 63.3000(c)(1) to indicate when the transition to semiannual reporting should begin. The commenter also noted that the EPA should correct a typographical error in the introductory paragraph of 40 CFR 63.3000(c)(6) from ''paragraphs (c)(5)(i) through (ix) of this section'' to ''paragraphs (c)(6)(i) through (ix) of this section.''

Response: We have clarified 40 CFR 63.3000(c)(1) by adding text stating that if you deviate from the emission limits in 40 CFR 63.2983 or the operating limits in 40 CFR 63.2984 in the quarter prior to February 28, 2019, you must include this information in the report for the first full semiannual reporting period following February 28, 2019. We also acknowledge the commenter's suggested correction to the introductory sentence of 40 CFR 63.3000(c)(6) and have revised this text as recommended.

b. Requirements for Facilities Using Non-HAP Binders

Comment: One commenter supported the proposed changes reducing unnecessary regulatory burdens when non-HAP binders are in use. This commenter supported the EPA's proposal to exempt drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders from performance testing requirements. The commenter suggested that the EPA could limit the scope of 40 CFR 63.2981(a) to exclude such (non-HAP) ovens from applicability under this section of the rule. The commenter also stated that the EPA should revise Table 1 to 40 CFR part 63, subpart HHHH, to apply footnote ''d'' to line 1 (''Thermal oxidizer temperature'') and to line 2 (''Other process or control device parameters in your OMM plan'') in order to make effective the EPA's intent not to require monitoring or recordkeeping for periods when binders containing no HAP were in use.

Response: We acknowledge the commenter's support for the exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders. We did not receive any comments objecting to this change and are finalizing changes to the 40 CFR 63.2991 introductory text to exclude drying and curing ovens using exclusively non-HAP binders. The EPA is not accepting the suggested text changes to 40 CFR 63.2981(a) recommended by the commenter because facilities that use exclusively non-HAP binders may still be subject to 40 CFR part 63, subpart HHHH, if they are collocated with a major source. However, such facilities would not be required to conduct performance testing and would only be subject to recordkeeping and reporting requirements. We also acknowledge the commenter's suggested revisions to Table 1 to 40 CFR part 63, subpart HHHH, and we have made these edits, including minor clarifications to footnote ''d'' (new footnote ''4'') in the final rule.

Comment: One commenter requested that the EPA revise the new definition of the term ''non-HAP binder'' to refer to the SDS, the term used in the current OSHA Hazard Communication Standard, 29 CFR 1910.1200(b). This same commenter further requested that the EPA tie the definition of non-HAP binder to the OSHA Hazard Communication Standard's criteria for disclosing composition or ingredients in Section 3 of SDSs.

Response: We acknowledge the commenter's suggested revisions and have clarified the definition of ''Non-HAP binder'' as provided by the commenter. We have further revised this definition to clarify that the affected source may not rely on the SDS for a non-HAP binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from

Section 3 of the SDS, or withheld this information, when making the case that a binder used is a non-HAP binder. The definition of ''Non-HAP binder'' has been revised as set out in the regulatory text at the end of this document.

c. Miscellaneous Corrections or Clarifications Recommended by Commenters

Comment: One commenter requested that the EPA revise 40 CFR 63.2985(a) and (b) to specify when the compliance dates for the SSM requirements, the electronic reporting requirements, and all other requirements take effect.

Response: The EPA agrees with the commenter and has clarified 40 CFR 63.2985 of the final rule to specify when the compliance dates for new provisions apply. Specific compliance dates for individual provisions are included in 40 CFR 63.2986, 63.2998, 63.3000, 40 CFR 63.3004, and Table 2 to 40 CFR part 63, subpart HHHH. In general, we are providing for 180 days for existing sources to comply with the revised rule requirements. We are also finalizing proposed changes to 40 CFR 63.2985(d) that require new or reconstructed drying and curing ovens that commenced operation between the date of the proposal and the date of the final rule to comply on the effective date of the final rule or startup (whichever is later).

Comment: One commenter suggested that the EPA remove the definition of ''binder application vacuum exhaust'' from 40 CFR 63.3004, as this term is not used in the standard as proposed.

Response: The EPA agrees with the commenter that the definition for ''binder application vacuum exhaust'' is no longer relevant for the subpart and has removed the definition from the final rule.

Comment: One commenter requested that the EPA revise Table 2 to 40 CFR part 63, subpart HHHH, to clarify that only 40 CFR 63.14(b)(2) and (3) apply to subpart HHHH, rather than all of 40 CFR 63.14.

Response: The EPA agrees with the commenter's recommended revision to Table 2 to 40 CFR part 63, subpart HHHH, and has revised the table entry for ''§ 63.14'' accordingly.

Additional comments on the revisions to the monitoring, recordkeeping, and reportng provisions and our specific responses to those comments can be found in the comment summary and response document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,* which is available in the docket for this action.

4. What is the rationale for our final approach for the revisions to monitoring, performance testing, and reporting requirements?

We evaluated all of the comments on the EPA's proposed amendments to the monitoring, recordkeeping, and reporting provisions for this subpart, and the proposed technical and editorial corrections. These comments were generally supportive, and requested only minor clarifications and corrections to the proposed text. We are finalizing these amendments as proposed, with the exception of the minor changes discussed in this section.

Additionally, we solicited comments on revising 40 CFR 63.2991 to exempt drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders from performance testing requirements. We received only supportive comments on this potential change. We are, therefore, promulgating changes to the 40 CFR 63.2991 introductory text to exclude drying and curing ovens using exclusively non-HAP binders from meeting the requirements of this section. Facilities that use a combination of HAP and non-HAP binders would continue to be required to conduct performance tests as currently required under the subpart.

E. Requirements for Submission of Performance Tests for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed amendments that would require owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports. More information concerning these proposed revisions is in the preamble to the proposed rule (83 FR 14984).

2. How did the requirements for submission of performance tests change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, the requirement for owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports has not changed. The EPA is requiring owners and operators of wet-formed fiberglass mat production facilities to submit electronic copies of certain required performance test reports through the EPA's CDX using CEDRI. The final rule requires that performance test results be submitted using the ERT.

The electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in those reports; is in keeping with current trends in data availability and transparency; will further assist in the protection of public health and the environment; will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements, and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance; and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes; thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors; and providing data quickly and accurately to the affected facilities, air agencies, the EPA and the public. For a more thorough discussion of electronic reporting, see the memorandum titled *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* which is available in Docket ID No. EPA–HQ–OAR–2004–0309.

3. What key comments did we receive on submission of performance tests, and what are our responses?

We received comments in support of and against the proposed requirement for owners and operators to submit electronic copies of performance test reports. Generally, the comments that were not supportive of the proposed requirements to submit performance tests electronically expressed concern that the requirements could require duplicative or burdensome reporting, or expressed concerns regarding delayed reporting requirements for sources to take in cases of events that may cause a delay in reporting. After review of these comments, we determined that no changes are necessary. The comments and our specific responses can be found in the document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,* which is available in the docket for this action.

A commenter requested that the EPA clarify the written notification of delayed reporting requirement in the proposed amendment to 40 CFR 63.3000(f). In response to this request, the EPA has revised the language in 40 CFR 63.3000(f) to state that an owner or operator must provide information on

the date(s) and time(s) either CDX or CEDRI is unavailable when a user attempts to gain access in the 5 business days prior to the submission deadline.

4. What is the rationale for our final approach for submission of performance tests?

We evaluated all of the comments on the EPA's proposed amendments requiring owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports. For the reasons explained in the proposed rule, we determined that these amendments increase the ease and efficiency of data submittal and improve data accessibility. More information concerning the proposed requirement for owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports is in the preamble to the proposed rule (83 FR 14984) and the document, *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,* which is available in the docket for this action. Therefore, we are finalizing our approach for submission of performance tests, as proposed.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

The EPA estimates that there are seven wet-formed fiberglass mat production facilities that are subject to the Wet-Formed Fiberglass Mat Production NESHAP and would be affected by these final amendments. The basis of our estimate of affected facilities is provided in the memorandum titled *Wet-Formed Fiberglass: Residual Risk Modeling File Documentation,* which is available in the docket for this action. We are not currently aware of any planned or potential new or reconstructed wet-formed fiberglass mat production facilities.

B. What are the air quality impacts?

The EPA estimates that annual HAP emissions from the seven wet-formed fiberglass mat production facilities that are subject to the NESHAP are approximately 23 tpy. Because we are not finalizing revisions to the emission limits, we do not anticipate any air quality impacts as a result of the final rule's amendments.

C. What are the cost impacts?

The seven wet-formed fiberglass mat production facilities that would be subject to the final amendments would incur minimal net costs to meet revised recordkeeping and reporting requirements, some estimated to have costs and some estimated to have cost savings. Nationwide annual net costs associated with the final requirements are estimated to be $200 per year in each of the 3 years following promulgation of amendments. This estimated total annual cost is comprised of estimated annual costs of about $1,390, which are offset by the estimated annual cost savings of about $1,190. The EPA believes that the seven wet-formed fiberglass mat production facilities which are known to be subject to the NESHAP can meet the final requirements without incurring additional capital or operational costs. Therefore, the only costs associated with the final amendments are related to recordkeeping and reporting labor costs. For further information on the requirements being finalized, see sections III and IV of this preamble. For further information on the costs and cost savings associated with the final requirements, see the memorandum titled *Cost Impacts of Wet-Formed Fiberglass Mat Production Risk and Technology Review (Final Rule),* and the document, *Supporting Statement for NESHAP for Wet-Formed Fiberglass Mat Production (Final Rule),* which are both available in the docket for this action.

D. What are the economic impacts?

As noted above, the nationwide annual costs associated with the final requirements are estimated to be approximately $200 per year in each of the 3 years following promulgation of the amendments. The present value of the total cost over these 3 years is approximately $550 in 2016 dollars under a 3-percent discount rate, and $510 in 2016 dollars under a 7-percent discount rate. These costs are not expected to result in business closures, significant price increases, or substantial profit loss.

For further information on the economic impacts associated with the requirements being promulgated, see the memorandum titled *Final Economic Impact Analysis for the Risk and Technology Review: Wet-Formed Fiberglass Mat Production Source Category,* which is available in the docket for this action.

E. What are the benefits?

Although the EPA does not anticipate reductions in HAP emissions as a result of the final amendments, we believe that the action, if finalized, would result in improvements to the rule. Specifically, the final amendment requiring electronic submittal of performance test results will increase the usefulness of the data, is in keeping with current trends of data availability, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated community. In addition, the final amendments reducing parameter monitoring and recording and performance testing requirements when non-HAP binder is being used to produce mat will reduce burden for regulated facilities during such periods, while continuing to protect public health and the environment. See section IV.D of this preamble for more information.

F. What analysis of environmental justice did we conduct?

As discussed in the preamble to the proposed rule, to examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Wet-Formed Fiberglass Mat Production source category across different demographic groups within the populations living near facilities. The results of this analysis indicated that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples.

The documentation for this decision is contained in section IV.A of the preamble to the proposed rule and the technical report titled *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production,* which is available in the docket for this action.

G. What analysis of children's environmental health did we conduct?

This action's health and risk assessments are contained in sections IV.A and B of this preamble and further documented in the risk report titled *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule,* which is available in the docket for this action.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be

found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

The information collection activities in this final rule have been submitted for approval to OMB under the PRA. The information collection request (ICR) document that the EPA prepared has been assigned EPA ICR number 1964.09. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

We are finalizing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart HHHH, in the form of eliminating the SSM plan and reporting requirements; requiring electronic submittal of performance test reports; reducing the frequency of compliance reports to a semiannual basis when there are deviations from applicable standards; and reducing the parameter monitoring and recording, and performance testing requirements during use of binder containing no HAP. We also included a review of the amended rule by affected facilities in the updated ICR for this final rule. In addition, the number of facilities subject to the standards changed. The number of respondents was reduced from 14 to 7 based on consultation with industry representatives and state/local agencies.

Respondents/affected entities: The respondents to the recordkeeping and reporting requirements are owners or operators of facilities that produce wet-formed fiberglass mat subject to 40 CFR part 63, subpart HHHH.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart HHHH).

Estimated number of respondents: Seven.

Frequency of response: The frequency of responses varies depending on the burden item. Responses include one-time review of rule amendments, reports of periodic performance tests, and semiannual compliance reports.

Total estimated burden: The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 1,470 hours (per year). Of these, 3 hours (per year) is the incremental burden to comply with the final rule amendments. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be $95,500 (per year), including $0 annualized capital or operation and maintenance costs. Of the total, $200 (per year) is the incremental cost to comply with the amendments to the rule.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. There are no small entities affected in this regulated industry. See the document titled *Final Economic Impact Analysis for the Risk and Technology Review: Wet-Formed Fiberglass Mat Production Source Category,* which is available in the docket for this action.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. None of the seven wet-formed fiberglass mat production facilities that have been identified as being affected by this action are owned or operated by tribal governments or located within tribal lands. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and B and sections IV.A and B of this preamble, and further documented in the risk report titled, *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule,* which is available in the docket for this action.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA has decided to use EPA Methods 1, 2, 3, 3A, 4, 316, 318, and 320 of 40 CFR part 60, appendix A. Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, appendix A, are used to determine the gas flow rate which is used with the concentration of formaldehyde to calculate the mass emission rate. While the EPA identified 11 voluntary consensus standards (VCS) as being potentially applicable as alternatives to EPA Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, the Agency is not using them. The use of these VCS would be impractical because of their

lack of equivalency, documentation, validation data, and/or other important technical and policy considerations.

Methods 316, 318, and 320 of 40 CFR part 60, appendix A, are used to determine the formaldehyde concentrations before and after the control device (*e.g.,* thermal oxidizer). The EPA conducted a search to identify potentially applicable VCS. However, the Agency identified no such standards, and none were brought to its attention in comments. Therefore, the EPA has decided to use Methods 316, 318, and 320 of 40 CFR part 60, appendix A.

Results of the search are documented in the memorandum titled, Voluntary Consensus Standard Results for National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production, which is available in the docket for this action. Additional information can be found at *https://www.epa.gov/emc/emc-promulgated-test-methods.*

The EPA is also promulgating revisions to 40 CFR 63.2984 to allow use of a more recent edition of the currently referenced ''Industrial Ventilation: A Manual of Recommended Practice,'' American Conference of Governmental Industrial Hygienists, *i.e.,* the appropriate chapters of ''Industrial Ventilation: A Manual of Recommended Practice for Design'' (27th edition), and revising the text regarding the existing IBR (chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice'' (23rd Edition)) by updating the reference to 40 CFR 63.14. These methods provide guidance on the capture and conveyance of formaldehyde emissions from each drying and curing oven to the thermal oxidizer. Owners and operators of wet-formed fiberglass mat production facilities may continue to use the existing reference (23rd edition), or the updated method (27th edition) may be obtained from American Conference of Governmental Industrial Hygienists (ACGIH), Customer Service Department, 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, telephone number (513) 742–2020. In addition, owners and operators may inspect a copy at U.S. EPA Library, 109 TW Alexander Drive, Research Triangle Park, North Carolina 27711, phone (919) 541–0094.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in section IV.A of this preamble and the technical report titled *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production,* which is available in the docket for this action.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 20, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 63.14 is amended by revising paragraphs (b)(2) and (3) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(b) * * *

(2) Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, ''Local Exhaust Hoods'' and Chapter 5, ''Exhaust System Design Procedure.'' IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).

(3) Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010. IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).

* * * * *

Subpart HHHH—National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

■ 3. Section 63.2984 is amended by revising paragraphs (a)(1) and (4), (b), and (e) to read as follows:

§ 63.2984 What operating limits must I meet?

(a) * * *

(1) You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.

* * * * *

(4) If you use an add-on control device other than a thermal oxidizer or wish to monitor an alternative parameter and comply with a different operating limit than the limit specified in paragraph (a)(1) of this section, you must obtain approval for the alternative monitoring under § 63.8(f). You must include the approved alternative monitoring and operating limits in the OMM plan specified in § 63.2987.

(b) When during a period of normal operation, you detect that an operating parameter deviates from the limit or range established in paragraph (a) of this section, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective actions must be completed in an expeditious manner as specified in the OMM plan.

* * * * *

(e) If you use a thermal oxidizer or other control device to achieve the emission limits in § 63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in Chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice'' (23rd Edition) or the appropriate chapters of ''Industrial Ventilation: A Manual of Recommended Practice for Design'' (27th Edition) (both are incorporated by reference, see § 63.14). In addition, you may use an alternate as approved by the Administrator.

■ 4. Section 63.2985 is amended by revising paragraphs (a) and (b) and (c) introductory text and adding paragraph (d) to read as follows:

§ 63.2985 When do I have to comply with these standards?

(a) Existing drying and curing ovens must be in compliance with this subpart no later than April 11, 2005, except as otherwise specified in this section and §§ 63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.

(b) Drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must be in compliance with this subpart at startup or by April 11, 2002, whichever is later, except as otherwise specified in this section and §§ 63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.

(c) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the following apply:

* * * * *

(d) Drying and curing ovens constructed or reconstructed after April 6, 2018 must be in compliance with this subpart at startup or by February 28, 2019 whichever is later.

■ 5. Section 63.2986 is amended by revising paragraph (g) to read as follows:

§ 63.2986 How do I comply with the standards?

* * * * *

(g) You must comply with the requirements in paragraphs (g)(1) through (3) of this section.

(1) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018 must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times, except during periods of startup, shutdown, or malfunction. After August 27, 2019, affected sources must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times, including periods of startup, shutdown, or malfunction. Affected sources that commence construction or reconstruction after April 6, 2018, must comply with all requirements of the subpart, no later than February 28, 2019 or upon startup, whichever is later.

(2) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must always operate and maintain any affected source, including air pollution control equipment and monitoring equipment, according to the provisions in § 63.6(e)(1). After August 27, 2019, for such affected sources, and after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if you are in compliance with the emissions limits required by this subpart. The Administrator will base the determination of whether a source is operating in compliance with operation and maintenance requirements on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(3) Before August 28, 2019, for each existing source and for each new or reconstructed source for which construction commenced after May 26, 2000 and before April 9, 2018, you must maintain your written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). The startup, shutdown, and malfunction plan must address the startup, shutdown, and corrective actions taken for malfunctioning process and air pollution control equipment. A startup, shutdown, and malfunction plan is not required for such affected sources after August 27, 2019. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

■ 6. Section 63.2987 is amended by revising paragraph (a) introductory text and paragraph (d) to read as follows:

§ 63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?

(a) You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Table 1 to this subpart lists the minimum monitoring requirements. Your plan must specify the items listed in paragraphs (a)(1) through (3) of this section:

* * * * *

(d) Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 to this subpart establishes the minimum recordkeeping requirements.

■ 7. Section 63.2989 is amended by revising paragraph (a) introductory text to read as follows:

§ 63.2989 How do I change my OMM plan?

* * * * *

(a) To revise the ranges or levels established for your operating limits in § 63.2984, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

* * * * *

■ 8. Section 63.2991 is amended by revising the introductory text and paragraph (a) to read as follows:

§ 63.2991 When must I conduct performance tests?

Except for drying and curing ovens subject to a federally enforceable permit that requires the exclusive use of non-HAP binders, you must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of this section:

(a) *Initially.* You must conduct a performance test to demonstrate initial compliance and to establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards no later than 180 days after the applicable compliance date specified in § 63.2985.

* * * * *

■ 9. Section 63.2992 is amended by revising paragraphs (b), (d), and (e) to read as follows:

§ 63.2992 How do I conduct a performance test?

* * * * *

(b) You must conduct the performance test according to the requirements in § 63.7(a) through (d), (e)(2) through (4), and (f) through (h).

* * * * *

(d) During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in Table 1 to this subpart.

(e) You must conduct performance tests under conditions that are representative of the performance of the affected source. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the

Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

■ 10. Section 63.2993 is revised to read as follow:

§ 63.2993 What test methods must I use in conducting performance tests?

(a) Use EPA Method 1 (40 CFR part 60, appendix A–1) for selecting the sampling port location and the number of sampling ports.

(b) Use EPA Method 2 (40 CFR part 60, appendix A–1) for measuring the volumetric flow rate of the stack gas.

(c) Use EPA Method 3 or 3A (40 CFR part 60, appendix A–2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.

(d) Use EPA Method 4 (40 CFR part 60, appendix A–3) for measuring the moisture content of the stack gas.

(e) Use EPA Method 316, 318, or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.

(f) Use the method contained in appendix A to this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.

(g) Use the method in appendix B to this subpart for determining product loss-on-ignition.

■ 11. Section 63.2994 is amended by revising paragraph (a) to read as follows:

§ 63.2994 How do I verify the performance of monitoring equipment?

(a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of this section:

(1) Install and calibrate all process equipment, control devices, and monitoring equipment.

(2) Develop and implement a continuous parameter monitoring system (CPMS) quality control program that includes written procedures for CPMS according to § 63.8(d)(1) and (2). You must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this subpart, to be made available for inspection, upon request, by the Administrator. If you revise the performance evaluation plan, you must keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. You should include the program of corrective action in the plan required under § 63.8(d)(2).

(3) Conduct a performance evaluation of the CPMS according to § 63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

* * * * *

■ 12. Section 63.2996 is revised to read as follows:

§ 63.2996 What must I monitor?

(a) You must monitor the parameters listed in Table 1 to this subpart and any other parameters specified in your OMM plan. You must monitor the parameters, at a minimum, at the corresponding frequencies listed in Table 1 to this subpart, except as specified in paragraph (b) of this section.

(b) During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to this subpart.

■ 13. Section 63.2997 is amended by revising paragraphs (a) introductory text and (b) to read as follows:

§ 63.2997 What are the requirements for monitoring devices?

(a) If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

* * * * *

(b) If you use process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

■ 14. Section 63.2998 is amended by:

■ a. Revising the introductory text, paragraphs (a) and (c), (e) introductory text, and (f);

■ b. Redesignating paragraph (g) as paragraph (h); and

■ c. Adding paragraphs (g) and (i).

The revisions and additions read as follows:

§ 63.2998 What records must I maintain?

You must maintain records according to the procedures of § 63.10. You must maintain the records listed in paragraphs (a) through (i) of this section.

(a) All records required by § 63.10, where applicable. Table 2 of this subpart presents the applicable requirements of the general provisions.

* * * * *

(c) During periods when the binder formulation being applied contains HAP, records of values of monitored parameters listed in Table 1 to this subpart to show continuous compliance with each operating limit specified in Table 1 to this subpart. If you do not monitor the parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.

* * * * *

(e) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if an operating parameter deviation occurs, you must record:

* * * * *

(f) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, keep all records specified in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. Records specified in § 63.6(e)(3)(iii) through (v) are not required to be kept after August 27, 2019 for existing or new drying and curing ovens.

(g) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in § 63.2983 or an operating limit in § 63.2984, you must record the number of failures and, for each failure, you must:

(1) Record the date, time, and duration of the failure;

(2) Describe the cause of the failure;

(3) Record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; and

(4) Record actions taken to minimize emissions in accordance with § 63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.

* * * * *

(i) Records showing how the maximum residence time was derived.

■ 15. Section 63.2999 is amended by revising paragraph (b) and adding paragraph (c) to read as follows:

§ 63.2999 In what form and for how long must I maintain records?

* * * * *

(b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative medium, such as microfilm, computer, computer disks, compact disk, digital versatile disk, flash drive, other commonly used electronic storage medium, magnetic tape, or on microfiche.

(c) You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an onsite compliance evaluation.

■ 16. Section 63.3000 is amended by:

■ a. Revising paragraphs (c) introductory text, (c)(1) and (4), (c)(5) introductory text, and (c)(5)(viii) and (ix);

■ b. Adding paragraph (c)(6);

■ c. Redesignating paragraph (d) and (e) as paragraph (e) and (d), respectively, and revising newly redesignated paragraphs (e) and (d); and

■ e. Adding paragraphs (f) and (g).

The revisions and additions read as follows:

§ 63.3000 What notifications and reports must I submit?

* * * * *

(c) *Semiannual compliance reports.* You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) of this section.

(1) *Dates for submitting reports.* Unless the Administrator has agreed to a different schedule for submitting reports under § 63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. Before March 1, 2019, as required by § 63.10(e)(3), you must begin submitting quarterly compliance reports if you deviate from the emission limits in § 63.2983 or the operating limits in § 63.2984. After February 28, 2019, you are not required to submit quarterly compliance reports. If you deviate from the emission limits in § 63.2983 or the operating limits in § 63.2984 in the quarter prior to February 28, 2019, you must include this information in the report for the first full semiannual reporting period following February 28, 2019.

* * * * *

(4) *No deviations.* If there were no instances where an affected source failed to meet an applicable standard, including no deviations from the emission limit in § 63.2983 or the operating limits in § 63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement to that effect.

(5) *Deviations.* Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if there was a deviation from the emission limit in § 63.2983 or an operating limit in § 63.2984, the semiannual compliance report must contain the information in paragraphs (c)(5)(i) through (ix) of this section:

* * * * *

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(6) *Deviations.* For affected sources that commence construction or reconstruction after April 6, 2018, after February 28, 2019, and after August 27, 2019 for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in § 63.2983 or an operating limit in § 63.2984, the semiannual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:

(i) The date, time, and duration of each failure.

(ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in § 63.8(c)(8).

(iv) A list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(v) The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.

(vi) A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(vii) A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(d) *Startup, shutdown, malfunction reports.* Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified § 63.10(d)(5). No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

(e) *Performance test results.* You must submit results of each performance test (as defined in § 63.2) required by this subpart no later than 60 days after completing the test as specified in § 63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April 6, 2018, beginning February 28, 2019, and beginning no later than August 27, 2019 for all other affected sources, you must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as

listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via CEDRI (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*)). You must submit performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information you are submitting under paragraph (e)(1) is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage medium to the EPA. You must clearly mark the electronic medium as CBI and mail to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, Mail Drop C404–02, 4930 Old Page Rd., Durham, NC 27703. You must submit the same ERT or alternate file with the CBI omitted to the EPA via the EPA's CDX as described in paragraph (e)(1) of this section.

(f) *Claims of EPA system outage.* If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required test report within the time prescribed due to an outage of either the EPA's CEDRI or CDX Systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(g) *Claims of force majeure.* If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (g)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirements to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

■ 17. Section 63.3001 is revised to read as follows:

§ 63.3001 What sections of the general provisions apply to me?

You must comply with the requirements of the general provisions of 40 CFR part 63, subpart A, as specified in Table 2 of this subpart.

§ 63.3003 [Removed and Reserved]

■ 18. Section 63.3003 is removed and reserved.

■ 19. Section 63.3004 is amended by:

■ a. Removing the definition for ''Binder application vacuum exhaust''.

■ b. Revising the definition for ''Deviation''; and

■ c. Adding definitions for ''Maximum residence time'', ''Non-HAP binder'', ''Shutdown'', and ''Startup'' in alphabetical order.

The revisions and additions read as follows:

§ 63.3004 What definitions apply to this subpart?

* * * * *

Deviation means:

(1) Before August 28, 2019, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

(2) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

* * * * *

Maximum residence time means the longest time, during normal operation and excluding periods of ramping up to speed during startup, that a particular point on the fiberglass mat remains in the drying and curing oven. It is determined for each line by the equation:

$$T = L/S$$

Where:

T is the residence time, in seconds;

L is the length of the drying and curing oven, in feet; and

S is the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup, in feet per second.

Non-HAP binder means a binder formulation that does not contain any substance that is required to be listed in Section 3 of a safety data sheet (SDS) pursuant to 29 CFR 1910.1200(g) and that is a HAP as defined in section 112(b) of the Clean Air Act. In designating a non-HAP binder under this subpart, you may not rely on the SDS for a binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. You may not withhold this information when making the case that the binder is a non-HAP binder for the purposes of § 63.2996.

* * * * *

Shutdown after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the cessation of operation of the drying and curing of any binder-infused fiberglass mat for any purpose. Shutdown ends when the maximum residence time has elapsed after binder-infused fiberglass mat ceases to enter the drying and curing oven.

Startup after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the setting in operation of the drying and curing of binder-infused fiberglass mat for any purpose. Startup begins when binder-infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.

* * * * *

■ 20. Table 1 to subpart HHHH of part 63 is revised to read as follows:

TABLE 1 TO SUBPART HHHH OF PART 63—MINIMUM REQUIREMENTS FOR MONITORING AND RECORDKEEPING

As stated in § 63.2998(c), you must comply with the minimum requirements for monitoring and recordkeeping in the following table:

You must monitor these parameters:	At this frequency:	And record for the monitored parameter:
1. Thermal oxidizer temperature [1] [4]	Continuously	15-minute and 3-hour block averages.
2. Other process or control device parameters specified in your OMM plan [2] [4].	As specified in your OMM plan	As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate [4].	On each operating day, calculate the average lb/h application rate for each product manufactured during that day.	The average lb/h value for each product manufactured during the day.
4. Resin free-formaldehyde content [4]	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition [3] [4]	Measured at least once per day, for each product manufactured during that day.	The value for each product manufactured during the operating day.
6. UF-to-latex ratio in the binder [3] [4]	For each batch of binder prepared the operating day.	The value for each batch of binder prepared during the operating day.
7. Weight of the final mat product per square (lb/roofing square) [3] [4].	Each product manufactured during the operating day.	The value for each product manufactured during the operating day.
8. Average nonwoven wet-formed fiberglass mat production rate (roofing square/h) [3] [4].	For each product manufactured during the operating day.	The average value for each product manufactured during operating day.

[1] Required if a thermal oxidizer is used to control formaldehyde emissions.

[2] Required if process modifications or a control device other than a thermal oxidizer is used to control formaldehyde emissions.

[3] These parameters must be monitored and values recorded, but no operating limits apply.

[4] You are not required to monitor or record these parameters during periods when using a non-HAP binder. If you do not monitor these parameters during periods when using a non-HAP binder, you must record the dates and times that production of mat using the non-HAP binder began and ended.

■ 21. Table 2 to subpart HHHH of part 63 is revised to read as follows:

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.1(a)(1)–(4)	General Applicability	Yes.	
§ 63.1(a)(5)		No	[Reserved].
§ 63.1(a)(6)–(8)		Yes.	

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.1(a)(9)	.....	No	[Reserved].
§ 63.1(a)(10)–(14)	.....	Yes.	
§ 63.1(b)	Initial Applicability Determination	Yes.	
§ 63.1(c)(1)	Applicability After Standard Established.	Yes.	
§ 63.1(c)(2)	.....	Yes	Some plants may be area sources.
§ 63.1(c)(3)	.....	No	[Reserved].
§ 63.1(c)(4)–(5)	.....	Yes.	
§ 63.1(d)	.....	No	[Reserved].
§ 63.1(e)	Applicability of Permit Program	Yes.	
§ 63.2	Definitions	Yes	Additional definitions in § 63.3004.
§ 63.3	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(3)	Prohibited Activities	Yes.	
§ 63.4(a)(4)	.....	No	[Reserved].
§ 63.4(a)(5)	.....	Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)	Existing/Constructed/Reconstruction	Yes.	
§ 63.5(b)(2)	.....	No	[Reserved].
§ 63.5(b)(3)–(6)	.....	Yes.	
§ 63.5(c)	.....	No	[Reserved].
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction.	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on State Review.	Yes.	
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability.	Yes.	
§ 63.6(b)(1)–(5)	New and Reconstructed Sources–Dates.	Yes.	
§ 63.6(b)(6)	.....	No	[Reserved].
§ 63.6(b)(7)	.....	Yes.	
§ 63.6(c)(1)–(2)	Existing Sources Dates	Yes	§ 63.2985 specifies dates.
§ 63.6(c)(3)–(4)	.....	No	[Reserved].
§ 63.6(c)(5)	.....	Yes.	
§ 63.6(d)	.....	No	[Reserved].
§ 63.6(e)(1)(i)	General Duty to Minimize Emissions	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2986(g) for general duty requirement.
§ 63.6(e)(1)(ii)	Requirement to Correct Malfunctions As Soon As Possible.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.6(e)(1)(iii)	Operation and Maintenance Requirements.	Yes	§§ 63.2984 and 63.2987 specify additional requirements.
§ 63.6(e)(2)	.....	No	[Reserved].
§ 63.6(e)(3)	SSM Plan Requirements	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.6(f)(1)	SSM Exemption	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.6(f)(2) and (3)	Compliance with Non–Opacity Emission Standards.	Yes.	
§ 63.6(g)	Alternative Non–Opacity Emission Standard.	Yes	EPA retains approval authority.

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.6(h)	Compliance with Opacity/Visible Emissions Standards.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.6(i)(1)–(14)	Extension of Compliance	Yes.	
§ 63.6(i)(15)		No	[Reserved].
§ 63.6(i)(16)		Yes.	
§ 63.6(j)	Exemption from Compliance	Yes.	
§ 63.7(a)	Performance Test Requirements—Applicability and Dates.	Yes.	
§ 63.7(b)	Notification of Performance Test	Yes.	
§ 63.7(c)	Quality Assurance Program/Test Plan.	Yes.	
§ 63.7(d)	Testing Facilities	Yes.	
§ 63.7(e)(1)	Performance Testing	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2992(c).
§ 63.7(e)(2)–(4)	Conduct of Tests	Yes	§§ 63.2991–63.2994 specify additional requirements.
§ 63.7(f)	Alternative Test Method	Yes	EPA retains approval authority
§ 63.7(g)	Data Analysis	Yes.	
§ 63.7(h)	Waiver of Tests	Yes.	
§ 63.8(a)(1)–(2)	Monitoring Requirements—Applicability.	Yes.	
§ 63.8(a)(3)		No	[Reserved].
§ 63.8(a)(4)		Yes.	
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.8(c)(1)(ii)	Continuous Monitoring System (CMS) Operation and Maintenance.	Yes.	
§ 63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.8(c)(2)–(4)		Yes.	
§ 63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Procedures.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.8(c)(6)–(8)		Yes.	
§ 63.8(d)(1) and (2)	Quality Control	Yes.	
§ 63.8(d)(3)	Written Procedures for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2994(a).
§ 63.8(e)	CMS Performance Evaluation	Yes.	
§ 63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	EPA retains approval authority.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart HHHH does not require the use of continuous emissions monitoring systems (CEMS).
§ 63.8(g)(1)	Data Reduction	Yes.	
§ 63.8(g)(2)	Data Reduction	No	Subpart HHHH does not require the use of CEMS or COMS.
§ 63.8(g)(3)–(5)	Data Reduction	Yes.	
§ 63.9(a)	Notification Requirements—Applicability.	Yes.	
§ 63.9(b)	Initial Notifications	Yes.	
§ 63.9(c)	Request for Compliance Extension	Yes.	

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.9(d)	New Source Notification for Special Compliance Requirements.	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes.	
§ 63.9(f)	Notification of Visible Emissions/ Opacity Test.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.9(g)(1)	Additional CMS Notifications	Yes.	
§ 63.9(g)(2)–(3)		No	Subpart HHHH does not require the use of COMS or CEMS.
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes	§ 63.3000(b) specifies additional requirements.
§ 63.9(h)(4)		No	[Reserved].
§ 63.9(h)(5)–(6)		Yes.	
§ 63.9(i)	Adjustment of Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements.	Yes	§ 63.2998 includes additional requirements.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2998(g) for recordkeeping requirements for an affected source that fails to meet an applicable standard.
§ 63.10(b)(2)(iii)	Maintenance Records	Yes.	
§ 63.10(b)(2)(iv) and (v)	Actions Taken to Minimize Emissions During SSM.	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes.	
§ 63.10(b)(2)(vii)–(xiv)	Other CMS Requirements	Yes.	
§ 63.10(b)(3)	Recordkeeping requirement for applicability determinations.	Yes.	
§ 63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
§ 63.10(c)(2)–(4)		No	[Reserved].
§ 63.10(c)(5)–(8)		Yes.	
§ 63.10(c)(9)		No	[Reserved].
§ 63.10(c)(10)–(14)		Yes.	
§ 63.10(c)(15)	Use of SSM Plan	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	§ 63.3000 includes additional requirements.
§ 63.10(d)(2)	Performance Test Results	Yes	§ 63.3000 includes additional requirements.
§ 63.10(d)(3)	Opacity or Visible Emissions Observations.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(d)(4)	Progress Reports Under Extension of Compliance.	Yes.	
§ 63.10(d)(5)	SSM Reports	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.3000(c) for malfunction reporting requirements.

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.10(e)(1)	Additional CMS Reports—General	No	Subpart HHHH does not require CEMS.
§ 63.10(e)(2)	Reporting results of CMS performance evaluations..	Yes.	
§ 63.10(e)(3)	Excess Emission/CMS Performance Reports..	Yes.	
§ 63.10(e)(4)	COMS Data Reports	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	EPA retains approval authority.
§ 63.11	Control Device Requirements—Applicability..	No	Facilities subject to subpart HHHH do not use flares as control devices.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes	See § 63.14(b)(2) and (3) for applicability requirements.
§ 63.15	Availability of Information/Confidentiality.	Yes.	

[FR Doc. 2019–01685 Filed 2–27–19; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[Docket Nos. 120328229–4949–02 and 180117042–8884–02]

RIN 0648–XG839

Atlantic Highly Migratory Species; Atlantic Bluefin Tuna Fisheries

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; annual adjustment of Atlantic bluefin tuna Purse Seine and Reserve category quotas; inseason quota transfer from the Reserve category to the General category.

SUMMARY: NMFS is adjusting the Atlantic bluefin tuna (BFT) Purse Seine and Reserve category quotas for 2019, as it has done annually since 2015. NMFS also is transferring 25 metric tons (mt) of BFT quota from the Reserve category to the General category January 2019 period (from January 1 through March 31, 2019, or until the available subquota for this period is reached, whichever comes first). The transfer to the General category is based on consideration of the regulatory determination criteria regarding inseason adjustments and applies to Atlantic tunas General category (commercial) permitted vessels and Highly Migratory Species (HMS) Charter/Headboat category permitted vessels with a commercial sale endorsement when fishing commercially for BFT.

DATES: Effective February 25, 2019, through December 31, 2019.

FOR FURTHER INFORMATION CONTACT: Sarah McLaughlin, 978–281–9260, Uriah Forrest-Bulley, 978–675–2154, or Larry Redd, 301–427–8503.

SUPPLEMENTARY INFORMATION: Regulations implemented under the authority of the Atlantic Tunas Convention Act (ATCA; 16 U.S.C. 971 *et seq.*) and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; 16 U.S.C. 1801 *et seq.*) governing the harvest of BFT by persons and vessels subject to U.S. jurisdiction are found at 50 CFR part 635. Section 635.27 subdivides the U.S. BFT quota recommended by the International Commission for the Conservation of Atlantic Tunas (ICCAT) among the various domestic fishing categories, per the allocations established in the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan (2006 Consolidated HMS FMP) (71 FR 58058, October 2, 2006), as amended by Amendment 7 to the 2006 Consolidated HMS FMP (Amendment 7) (79 FR 71510, December 2, 2014). NMFS is required under ATCA and the Magnuson-Stevens Act to provide U.S. fishing vessels with a reasonable opportunity to harvest the ICCAT-recommended quota.

Annual Adjustment of the BFT Purse Seine and Reserve Category Quotas

In 2018, NMFS implemented a final rule that established the U.S. BFT quota and subquotas consistent with ICCAT Recommendation 17–06 (83 FR 53191, October 11, 2018). As a result, based on the currently codified U.S. quota of 1,247.86 mt (not including the 25 mt allocated by ICCAT to the United States to account for bycatch of BFT in pelagic longline fisheries in the Northeast Distant Gear Restricted Area), the baseline Purse Seine, General, and Reserve category quotas are codified as 219.5 mt, 555.7 mt, and 29.5 mt, respectively. See § 635.27(a). For 2019 to date, NMFS has made the following inseason quota transfers: 19.5 mt from the General category December 2019 subquota period to the January 2019 subquota period (83 FR 67140, December 28, 2018) and 26 mt from the Reserve category to the General category (84 FR 3724, February 13, 2019), resulting in an adjusted 2019 Reserve category quota of 3.5 mt.

Pursuant to § 635.27(a)(4), NMFS has determined the amount of quota available to the Atlantic Tunas Purse Seine category participants in 2019, based on their BFT catch (landings and dead discards) in 2018. In accordance with the regulations, NMFS makes available to each Purse Seine category participant either 100 percent, 75 percent, 50 percent, or 25 percent of the individual baseline quota allocations based on the previous year's catch, as described in § 635.27(a)(4)(ii), and reallocates the remainder to the Reserve category. NMFS has calculated the

warrant, or petty officer designated by the Captain of the Port North Carolina (COTP) for the enforcement of the safety zone.

(c) *Regulations.* (1) The general regulations governing safety zones in subpart C of this part apply to the area described in paragraph (a) of this section.

(2) Entry into or remaining in this safety zone is prohibited unless authorized by the COTP North Carolina or the COTP North Carolina's designated representative.

(3) All vessels within this safety zone when this section becomes effective must depart the zone immediately.

(4) To request permission to remain in, enter, or transit through the safety zone, contact the COTP North Carolina or the COTP North Carolina's representative through the Coast Guard Sector North Carolina Command Duty Officer, Wilmington, North Carolina, at telephone number 910–343–3882, or on VHF–FM marine band radio channel 13 (165.65 MHz) or channel 16 (156.8 MHz).

(d) *Enforcement.* The U.S. Coast Guard may be assisted in the patrol and enforcement of the safety zone by Federal, State, and local agencies.

Dated: June 25, 2018.

Bion B. Stewart,

Captain, U.S. Coast Guard, Captain of the Port North Carolina.

[FR Doc. 2018–14169 Filed 6–29–18; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2009–0234; FRL–9980–41–OAR]

RIN 2060–AT42

Remaining Requirements for Mercury and Air Toxics Standards (MATS) Electronic Reporting Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to extend the period during which certain electronic reports required by the Mercury and Air Toxics Standards (MATS) may be submitted as portable document format (PDF) files using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. This action will extend the end date of that period from June 30, 2018, to July 1, 2020. This extension is necessary because the electronic reporting system that owners or operators of affected MATS sources will be required to use when PDF filing is no longer allowed will not be available by June 30, 2018. This extension does not alter the responsibility of owners or operators of affected MATS sources to comply with the applicable MATS and report their compliance information to the appropriate authority. In addition, this extension ensures that the compliance information can be submitted in a timely manner and made available to the public. Finally, this rule is effective on July 1, 2018, to provide the regulated community a continuous and viable vehicle to submit compliance reports.

DATES: This final rule is effective on July 1, 2018.

ADDRESSES: *Docket:* The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2009–0234. All documents in the docket are listed on the *https://www.regulations.gov website.* Although listed in the index, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy. Publicly available docket materials are available electronically through *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Mr. Barrett Parker, Sector Policies and Programs Division, Office of Air Quality Planning and Standards (D243–05), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541–5635; email address: *parker.barrett@epa.gov.*

SUPPLEMENTARY INFORMATION: The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Categories and entities potentially affected by this action include:

Category	NAICS code [1]	Examples of potentially regulated entities
Industry	221112	Fossil fuel-fired EGUs.
Federal government	[2] 221122	Fossil fuel-fired EGUs owned by the Federal government.
State/local/Tribal government	[2] 221122	Fossil fuel-fired EGUs owned by municipalities.
	921150	Fossil fuel-fired EGUs in Indian country.

[1] North American Industry Classification System.

[2] Federal, state, or local government-owned and operated establishments are classified according to the activity in which they are engaged.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by

this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability criteria in 40 CFR 63.9981 of the rule. If you have questions regarding the applicability of this action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13.

B. What action is the Agency taking?

This final action extends the period allowing owners or operators of affected sources subject to the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (commonly known as the Mercury and Air Toxics Standards (MATS)) to submit certain reports as PDF file attachments using the ECMPS Client Tool until July 1, 2020. Prior to this extension, that period was scheduled to end on June 30, 2018. As explained further below, the EPA finds that there is ''good cause'' under the Administrative Procedure Act (APA) (5 U.S.C. 553(b)(B)) to make the amendments extending the deadline final without prior notice and comment, in part because the rule maintains the status quo, and the reporting system that would apply without the extension (*i.e.,* the Compliance and Emissions Data Reporting Interface (CEDRI)) is currently unable to accept the MATS reports, thus, making it impossible for the regulated community to comply with all reporting requirements without this extension. Thus, as explained further below, the EPA maintains that notice and comment is unnecessary and contrary to the public interest for this action. The EPA also finds good cause under APA 553(d)(3) to make this rule effective on July 1, 2018, instead of 30 days after publication as generally required, to ensure that there are no gaps in the regulated community's ability to submit all the required reports.

C. What is the Agency's authority for taking this action?

The Agency's authority is found at 42 U.S.C. 7401 *et seq.* and 5 U.S.C. 553 *et seq.*

D. What are the incremental costs and benefits of this action?

This extension of the time period allowing temporary submission of PDF file attachments has neither costs nor benefits.

II. Supplemental Information

A. Background

On February 12, 2012, the EPA issued the final MATS (77 FR 9304; February 16, 2012). In that rule, owners or operators of coal- or oil-fired electric utility steam generating units (EGUs) were required to report emissions and compliance information electronically using two data systems: The ECMPS Client Tool and CEDRI. The two electronic reporting systems were intended to accept different MATS compliance related information (*e.g.,* the ECMPS Client Tool was to be used by EGU owners or operators to report, among other things, mercury (Hg) continuous monitoring data and the CEDRI system was to be used to submit, among other things, semiannual compliance reports). *See* 40 CFR 63.10031(a), (f).

After promulgation, but prior to the existing-source compliance date of April 16, 2015, the regulated community suggested to the EPA that the electronic reporting burden of MATS could be significantly reduced if all the required information were reported to one data system instead of two. Specifically, the regulated community suggested that the EPA amend MATS to require all the data to be reported through the ECMPS Client Tool, which is a familiar data system that most EGU owners or operators have been using since 2009 to meet the electronic reporting requirements of the Acid Rain Program.

In response, the EPA decided to require all electronic reports required by MATS to be submitted through the ECMPS Client Tool, but the Agency recognized that it could not make the necessary changes to the ECMPS Client Tool by the April 16, 2015, compliance date. For that reason, the EPA issued a final rule on March 24, 2015, prior to the MATS compliance date, revising the MATS reporting requirements (80 FR 15511; March 24, 2015). Among other things, the final rule suspended the requirement to submit to CEDRI the MATS compliance reports described in 40 CFR 63.10031(f)(1), (f)(2), and (f)(4), and instead allowed parties to submit those reports to the ECMPS Client Tool as PDF files. *See* 40 CFR 63.10031(f)(6). The EPA included a self-imposed deadline of April 17, 2017, to revise the ECMPS Client Tool to accept all of the MATS compliance information. If the revised system was not ready by that date, the rule required reporting of the MATS compliance data to revert to the original two-system approach on and after that date. *See* 40 CFR 63.10031(f).

On September 29, 2016, the EPA proposed for comment to revise MATS to require a single electronic reporting system, (*i.e.,* the ECMPS Client Tool), and also proposed to extend the PDF file reporting period from April 17, 2017, to December 31, 2017, by which date the Agency believed it would complete the necessary changes to the ECMPS Client Tool (81 FR 67062; September 29, 2016). The comment period was scheduled to close on October 31, 2016, but it was subsequently extended until November 15, 2016, in response to requests from several stakeholders for an extension. The public comments were generally supportive of simplifying and streamlining the MATS reporting requirements and to use the ECMPS Client Tool as the single electronic reporting system. However, industry commenters questioned whether the EPA would complete the changes to the ECMPS Client Tool by December 31, 2017, and suggested dates ranging from six quarters after completion of the final rule was issued to 2020. No commenters stated that the EPA should not extend the PDF file reporting period. On April 6, 2017, the EPA finalized an extension of the PDF file reporting period from April 17, 2017, to June 30, 2018, because the Agency recognized it would not complete the necessary revisions to the ECMPS Client Tool and conduct the necessary testing by the December 31, 2017, proposed extension date (82 FR 16736; April 6, 2017).[1]

The EPA continues to work on the ECMPS Client Tool, but the Agency recently concluded that the changes and necessary testing will not be completed by June 30, 2018. In addition, the CEDRI interface is not currently capable of accepting the compliance reports that are currently being submitted via PDF files to the ECMPS Client Tool. This means that EGU owners or operators would be unable to submit the required reports if PDF file reporting authority is not extended. Moreover, the CEDRI interface cannot be operational before July 1, 2018 (*i.e.,* the first date CEDRI reporting would be required absent an extension), and the EPA is continuing to change the ECMPS Client Tool to accept all of the MATS compliance reports. For these reasons, the EPA has concluded that it is reasonable to continue to allow the PDF file reporting option. This extension changes neither the responsibility of all owners or operators of affected sources to comply with the applicable MATS emissions standards and other requirements nor the compliance information available to the

[1] In addition to extending the interim PDF file submission process to June 30, 2018, the final rule also made a few technical corrections to Appendix A.

public as PDF files. For all these reasons, the EPA is revising the reporting requirements in the MATS regulations, 40 CFR 63.10021 and 63.10031, by extending the period for affected sources to submit certain compliance related information via PDF file reports from June 30, 2018, to July 1, 2020.

B. Why is the Agency taking final action without providing an opportunity for public comment?

As noted above, this action amends the reporting requirements by extending the period for affected sources to submit certain compliance related information via PDF file reports. This extension is critical because: (1) The EPA is still working to revise the ECMPS Client Tool so that it can accept all of the MATS compliance reports, and (2) the CEDRI system that would apply without this extension is not able to accept the compliance reports that are currently being submitted via PDF files. Without this action, affected source owners or operators would be unable to report certain MATS compliance information as required in the regulations and, as a result, the public would not have access to that information.

Section 553(b)(B) of the APA, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public comment are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. *See also* the final sentence of section 307(d)(1) of the Clean Air Act (CAA), 42 U.S.C. 7607(d)(1), indicating that CAA section 307(d) does not apply in the case of any rule or circumstance referred to in section 553(b)(B) of the APA. As explained further below, the EPA finds that providing notice and comment is unnecessary in this situation because the extension of PDF file reporting maintains the status quo and does not relieve the regulated community of its responsibility to comply with the MATS. In addition, when in April 2017 the EPA proposed and finalized an extension of the PDF file reporting requirement, the Agency received no comments against or legal challenge to that extension rulemaking. Finally, the EPA also finds that notice and comment rulemaking in these circumstances would be contrary to the public interest because the electronic system that would apply without the extension (*i.e.,* CEDRI) is currently unable to accept the MATS compliance reports that are currently being submitted via PDF files. Therefore, it would not be possible for affected source owners or operators to comply with all of the MATS reporting requirements without the extension and the public would be deprived of certain compliance related information as a result. The delay that would be inherent in notice and comment rulemaking would result in a potential loss of public availability of compliance information that is contrary to the public interest.

The EPA has determined that notice and comment procedures are unnecessary here for a number of reasons. First, this action will simply maintain the status quo and does not introduce any new substantive requirements.

Second, the EPA has no viable alternative to extending of PDF file reporting given that the CEDRI system is not currently able to accept the necessary reports. The EPA has concluded that the July 2020 extension date will provide the necessary time to complete the changes to and test the ECMPS Client Tool.

Third, the Agency previously provided an opportunity for comment on whether a PDF file reporting extension is justified where the electronic reporting system is not available. The Agency provided this opportunity for comment in the September 29, 2016, proposed rule (finalized April 6, 2017) to extend the PDF file reporting until June 30, 2018 (81 FR 67062; September 29, 2016 and 82 FR 16736; April 7, 2017). The EPA did not receive any comments suggesting that the extension of the PDF file reporting was unreasonable, although commenters did suggest the Agency provide more time than proposed. As a result, the Agency finalized an extension to June 30, 2018, 7 months longer than proposed, but considerably less time than suggested in comments. *See* 82 FR 16736. In this final rule, the EPA is recognizing that, as commenters in 2016 suggested, more time is needed to complete the move to the ECMPS Client Tool and that a longer extension of the PDF file reporting than the one previously afforded is appropriate.

In addition to finding that notice and comment rulemaking is unnecessary, the EPA also finds that providing notice and comment in this situation would be contrary to the public interest. If the EPA were to delay this action to provide an opportunity for public comment, there would be a gap period during which the public would not have access to all of the MATS compliance information required by the rule. As explained above, the CEDRI system is not currently capable of accepting the MATS compliance reports that parties would be required to submit to it. Thus, if the PDF file reporting extension were not provided, some MATS compliance information would not be accessible to the public for some time. In addition, EGU owners or operators, along with the public and regulatory agencies, are already familiar with the interim PDF file submission process and the EPA continues to work on the ECMPS Client Tool so that it can accept all of the MATS compliance reports. The current process of EGU owners or operators attaching PDF files when submitting reports via the ECMPS Client Tool is well understood by all parties interested in the data and ensures that all compliance data are reported. Conversely, EGU owners or operators are not familiar with CEDRI reporting for MATS, so requiring compliance with CEDRI for some interim period before the full implementation of the ECMPS Client Tool would potentially cause confusion for the regulated community and the public. The EPA maintains that, in light of these facts, it is contrary to the public interest to have an interim period during which both the EPA and EGU owners or operators would have to expend the resources and time necessary to enable partial CEDRI reporting before fully converting to the ECMPS Client Tool. For these reasons, the EPA finds that providing notice and comment in these particular circumstances would be contrary to the public interest.

For all these reasons, the EPA finds good cause exists under section 553(b)(B) of the APA to issue this final rule without prior notice and opportunity for comment.

C. Why is the Agency making this action effective on July 1, 2018?

The EPA also finds good cause to make this final rule effective on July 1, 2018. Section 553(d) of the APA, 5 U.S.C. 553(d), provides that final rules shall not become effective until 30 days after publication in the **Federal Register**, ''except . . . as otherwise provided by the agency for good cause,'' among other exceptions. The purpose of this provision is to ''give affected parties a reasonable time to adjust their behavior before the final rule takes effect.'' *Omnipoint Corp.* v. *FCC,* 78 F.3d 620, 630 (DC Cir. 1996); *see also United States* v. *Gavrilovic,* 551 F.2d 1099, 1104 (8th Cir. 1977) (quoting legislative history). Thus, in determining whether good cause exists to waive the 30-day delay, an agency should ''balance the necessity for immediate implementation against principles of fundamental fairness which require that all affected persons be afforded a reasonable amount of time

to prepare for the effective date of its ruling.'' *Gavrilovic,* 551 F.2d at 1105. The EPA has determined that it is necessary to make this final rule effective on July 1, 2018, instead of 30 days after publication in the **Federal Register**, to ensure that there are no gaps in the ability of affected MATS sources to submit the required compliance reports, given that the current authority to submit PDF file reports expires on June 30, 2018. The EPA also has determined that the owners or operators of affected MATS sources do not need time to adjust to this final action because this final rule simply maintains the status quo and does not introduce any new substantive requirements.

For these reasons, the EPA finds good cause exists under section 553(d)(3) of the APA to make this rule effective on July 1, 2018, instead of 30 days after publication in the **Federal Register**.

III. What is the scope of this amendment?

This action amends the reporting requirement in the MATS regulation, 40 CFR 63.10021 and 10031.

IV. What specific amendments to 40 CFR part 63, subpart UUUUU are made by this rule?

The interim PDF reporting process described in 40 CFR 63.10031(f) has been further extended through June 30, 2020, to allow sufficient time for software development, programming, and testing. Until then, compliance with the emissions and operating limits continues to be assessed based on the various PDF file report submittals described in 40 CFR 63.10021(e)(9) and 63.10031(f). Data are also obtained from Hg, hydrogen chloride, hydrogen fluoride, and sulfur dioxide continuous emission monitoring systems, as well as Hg sorbent trap monitoring systems, as reported through the ECMPS Client Tool.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulation and has assigned OMB Control Number 2060–0567. This action does not change the information collection requirements, and this action does not impose any new information collection burden under the PRA.

D. Regulatory Flexibility Act (RFA)

This action is not subject to the RFA. The RFA applies only to rules subject to notice and comment rulemaking requirements under the APA, 5 U.S.C. 553, or any other statute. This rule is not subject to notice and comment requirements because the Agency has invoked the APA ''good cause'' exemption under 5 U.S.C. 553(b).

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. As described earlier, this action has no net regulatory burden on governments already subject to MATS. Accordingly, we have determined that this action will not result in any ''significant'' adverse economic impact for small governments.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. As described earlier, this action has no substantial direct effect on Indian tribes already subject to MATS. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not establish an environmental health or safety standard. This regulatory action extends the deadline for interim reporting of electronic data; it does not have any impact on human health or the environment.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. The CRA allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and comment rulemaking procedures are impracticable, unnecessary, or contrary to the public interest (5 U.S.C. 808(2)). The EPA has made a good cause finding for this rule as discussed in sections II.B and C of this preamble, including the basis for that finding.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: June 26, 2018.

E. Scott Pruitt,

Administrator.

For the reasons set forth in the preamble, the EPA amends 40 CFR part 63 as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart UUUUU—National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

■ 2. Section 63.10021 is amended by revising paragraph (e)(9) to read as follows:

§ 63.10021 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

* * * * *

(e) * * *

(9) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, report the date of all tune-ups electronically, in accordance with § 63.10031(f). The tune-up report date is the date when tune-up requirements in paragraphs (e)(6) and (7) of this section are completed.

* * * * *

■ 3. Section 63.10031 is amended by revising paragraphs (f) introductory text, (f)(1), (2), (4), and (f)(6) introductory text to read as follows:

§ 63.10031 What reports must I submit and when?

* * * * *

(f) On or after July 1, 2020, within 60 days after the date of completing each performance test, you must submit the performance test reports required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *https://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using those test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority.

(1) On or after July 1, 2020, within 60 days after the date of completing each CEMS (SO_2, PM, HCl, HF, and Hg) performance evaluation test, as defined in § 63.2 and required by this subpart, you must submit the relative accuracy test audit (RATA) data (or, for PM CEMS, RCA and RRA data) required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (*https://cdx.epa.gov*). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (*https://www.epa.gov/ttn/chief/ert/index.html*). Only RATA data compounds listed on the ERT website are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph. The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the delegated authority, owners or operators shall also submit these RATAs to the delegated authority in the format specified by the delegated authority. Owners or operators shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in § 63.2 and as required in this chapter.

(2) On or after July 1, 2020, for a PM CEMS, PM CPMS, or approved alternative monitoring using a HAP metals CEMS, within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st, you must submit quarterly reports to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. For each reporting period, the quarterly reports must include all of the calculated 30-boiler operating day rolling average values derived from the CEMS and PM CPMS.

* * * * *

(4) On or after July 1, 2020, submit the compliance reports required under paragraphs (c) and (d) of this section and the notification of compliance status required under § 63.10030(e) to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format.

* * * * *

(6) Prior to July 1, 2020, all reports subject to electronic submittal in paragraphs (f) introductory text, (f)(1), (2), and (4) of this section shall be submitted to the EPA at the frequency specified in those paragraphs in electronic portable document format (PDF) using the ECMPS Client Tool. Each PDF version of a submitted report must include sufficient information to assess compliance and to demonstrate that the testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file:

* * * * *

[FR Doc. 2018–14308 Filed 6–29–18; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 54

[WC Docket No. 10–90; FCC 18–37]

Connect America Fund

AGENCY: Federal Communications Commission.

ACTION: Technical amendments.

SUMMARY: This document corrects errors in the rules that increase the amount of

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA–HQ–OAR–2017–0355: FRL–9995–70–OAR]

RIN 2060–AT67

Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is finalizing three separate and distinct rulemakings. First, the EPA is repealing the Clean Power Plan (CPP) because the Agency has determined that the CPP exceeded the EPA's statutory authority under the Clean Air Act (CAA). Second, the EPA is finalizing the Affordable Clean Energy rule (ACE), consisting of Emission Guidelines for Greenhouse Gas (GHG) Emissions from Existing Electric Utility Generating Units (EGUs) under CAA section 111(d), that will inform states on the development, submittal, and implementation of state plans to establish performance standards for GHG emissions from certain fossil fuel-fired EGUs. In ACE, the Agency is finalizing its determination that heat rate improvement (HRI) is the best system of emission reduction (BSER) for reducing GHG—specifically carbon dioxide (CO_2)—emissions from existing coal-fired EGUs. Third, the EPA is finalizing new regulations for the EPA and state implementation of ACE and any future emission guidelines issued under CAA section 111(d).

DATES: Effective September 6, 2019.

ADDRESSES: The EPA has established a docket for these actions under Docket ID No. EPA–HQ–OAR–2017–0355. All documents in the docket are listed on the *https://www.regulations.gov/* website. Although listed, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *https://www.regulations.gov/* or in hard copy at the EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC. The EPA's Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about these final actions, contact Mr. Nicholas Swanson, Sector Policies and Programs Division (Mail Code D205–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–4080; fax number: (919) 541–4991; and email address: *swanson.nicholas@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. The EPA uses multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms:

ACE Affordable Clean Energy Rule
AEO Annual Energy Outlook
ANPRM Advance Notice of Proposed Rulemaking
BACT Best Available Control Technology
BSER Best System of Emission Reduction
Btu British Thermal Unit
CAA Clean Air Act
CCS Carbon Capture and Storage (or Sequestration)
CFR Code of Federal Regulation
CO_2 Carbon Dioxide
CPP Clean Power Plan
EGU Electric Utility Generating Unit
EIA Energy Information Administration
EPA Environmental Protection Agency
FIP Federal Implementation Plan
GHG Greenhouse Gas
HRI Heat Rate Improvement
IGCC Integrated Gasification Combined Cycle
kW Kilowatt
kWh Kilowatt-hour
MW Megawatt
MWh Megawatt-hour
NAAQS National Ambient Air Quality Standards
NGCC Natural Gas Combined Cycle
NO_X Nitrogen Oxides
NSPS New Source Performance Standards
NSR New Source Review
OMB Office of Management and Budget
$PM_{2.5}$ Fine Particulate Matter
PRA Paperwork Reduction Act
PSD Prevention of Significant Deterioration
RIA Regulatory Impact Analysis
RTC Response to Comments
SIP State Implementation Plan
SO_2 Sulfur Dioxide
UMRA Unfunded Mandates Reform Act
U.S. United States
VFD Variable Frequency Drive

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Executive Summary

With this document, the EPA is, after review and consideration of public comments, finalizing three separate and distinct rulemakings. First, the EPA is finalizing the repeal of the CPP which was proposed at 82 FR 48035 (Oct. 16, 2017) (''Proposed Repeal''). Second, the EPA is promulgating ACE, which consists of emission guidelines for states to develop and submit to the EPA plans that establish standards of performance for CO_2 emissions from certain existing coal-fired EGUs within their jurisdictions. Third, the EPA is finalizing implementing regulations that provide direction to both the EPA and states on the implementation of ACE and any future emission guidelines issued under CAA section 111(d). This document does not include any final action concerning the New Source Review (NSR) reforms the EPA proposed in conjunction with the ACE proposal; the EPA intends to take final action on the proposed NSR reforms in a separate final action at a later date.

First, the EPA is repealing the CPP. In proposing to repeal the CPP, the Agency proposed a change in the legal interpretation of CAA section 111, on which the CPP was based, to an interpretation of the CAA that ''is consistent with the CAA's text, context, structure, purpose, and legislative history, as well as with the Agency's historical understanding and exercise of its statutory authority.'' [1] After further review of the EPA's statutory authority under CAA section 111 and in consideration of public comments, the Agency is finalizing the repeal of the CPP. The discussion of the repeal action, along with the EPA's explanation that it intends the repeal of the CPP to be independent from the other final actions in this document, can be found in section II below.

Second, the EPA is finalizing ACE, which consists of emission guidelines to inform states in the development, submittal, and implementation of state plans that establish standards of performance for CO_2 from certain existing coal-fired EGUs within their jurisdictions. In these emission guidelines, the EPA has determined that the BSER for existing EGUs is based on HRI measures that can be applied to a designated facility. ACE also clarifies the roles of the EPA and the states under CAA section 111(d). With the promulgation of this action, it is the states' responsibility to use the information and direction herein to develop standards of performance that reflect the application of the BSER. Per the CAA, states may also consider source-specific factors—including, among other factors, the remaining useful life of an existing source—in applying a standard of performance to that source. In this way, the state and federal roles complement each other as the EPA has the authority and responsibility to determine BSER at the national level, while the states have the authority and responsibility to establish and apply standards of performance for their existing sources, taking into consideration source-specific factors where appropriate. A full discussion of ACE can be found in section III of this preamble.

Third, the EPA is finalizing new implementing regulations that apply to ACE and any future emission guidelines promulgated under CAA section 111(d). The purpose of the new implementing regulations is to harmonize aspects of our existing regulations with the statute, in a new 40 CFR part 60, subpart Ba, by making it clear that states have broad discretion in establishing and applying emissions standards consistent with the BSER. The new implementing regulations also provide changes to the timing requirements for the EPA and states to take action to more closely align with the CAA section 110 state implementation plan (SIP) and federal implementation plan (FIP) deadlines. The discussion of the final revisions to the implementing regulations is found in section IV below.

The implementing regulations (and ACE which is promulgated consistent with those regulations) make clear that the EPA, states, and sources all have distinct roles, responsibilities, and flexibilities under CAA section 111(d). Specifically, the EPA identifies the BSER; states establish standards of performance for existing sources within their jurisdiction consistent with that BSER and also with the flexibility to consider source-specific factors, including remaining useful life; and sources then meet those standards using the technologies or techniques they believe is most appropriate. As this preamble explains, in the case of ACE, the EPA has identified the BSER as a set of heat rate improvement measures. States will establish standards of performance for existing sources based on application of those heat rate improvement measures (considering source-specific factors, including remaining useful life). Each regulated source then must meet those standards using the measures they believe is appropriate (*e.g.,* via the heat rate improvement measures identified by the EPA as the BSER, other heat rate improvement measures, or other approaches such as CCS or natural gas co-firing).

These three rules have been informed by more than 1.5 million public comments on the Proposed Repeal and 500,000 public comments on the proposals for ACE and the new implementing regulations. Per CAA section 307(d)(6)(B), the EPA is providing a response to the significant comments received for each of these actions in the docket. After careful consideration of the comments, the EPA is finalizing these three rules, with revisions to what it proposed where appropriate, to provide states guidance on how to address CO_2 emissions from coal-fired power plants in a way that is consistent with the EPA's authority under the CAA.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this document is available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this document at *https://www.epa.gov/stationary-sources-air-pollution/electric-utility-generating-units-emission-guidelines-greenhouse.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of these final rules and key technical documents at this same website.

C. Judicial Review and Administrative Reconsideration

Under CAA section 307(b)(1), judicial review of these final actions is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) by September 6, 2019. Under CAA section 307(b)(2), the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider a rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time

[1] Proposed Repeal, 82 FR 48036.

specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Repeal of the Clean Power Plan

A. Background for the Repeal of the Clean Power Plan

1. The Clean Power Plan

The EPA promulgated the CPP under section 111 of the CAA.[2] Section 111(b) authorizes the EPA to issue nationally applicable new source performance standards (NSPS) limiting air pollution from ''new sources'' in source categories that cause or significantly contribute to air pollution that may reasonably be anticipated to endanger public health or welfare.[3] In 2015, the EPA issued such a rule for GHG emissions—in particular, CO_2—from certain new fossil fuel-fired power plants [4] in light of the Agency's assessment ''that GHGs endanger public health, now and in the future.'' [5] CAA section 111(d) provides that, under certain circumstances, when the EPA issues a CAA section 111(b) standard, the EPA must develop procedures requiring each state to submit a plan to the EPA that establishes performance standards for *existing* sources in the same category.[6] The EPA relied on CAA section 111(d) to issue the CPP, which, for the first time, required states to submit plans specifically designed to limit CO_2 emissions from certain existing fossil fuel-fired power plants.

The CPP established emission guidelines for states to follow in limiting CO_2 emissions from those existing fossil fuel-fired power plants. Those emission guidelines included both state-specific ''goals'' and alternative, nationally uniform CO_2 emission performance rates for two types of existing fossil fuel-fired power plants: Electric utility steam generating units and stationary combustion turbines.[7]

In the CPP, the EPA determined that the BSER for CO_2 emissions from existing fossil fuel-fired power plants was the combination of: (1) Heat rate (*e.g.,* efficiency) improvements to be conducted at individual power plants, in combination with (2, 3) two other sets of measures based on the shifting of generation at the fleet-wide level from one type of energy source to another. The EPA referred to these three sets of measures as ''building blocks'': [8]

1. Improving heat rate at affected coal-fired steam generating units;

2. Substituting increased generation from lower-emitting existing natural gas combined cycle units for decreased generation from higher-emitting affected steam generating units; and

3. Substituting increased generation from new zero-emitting renewable energy generating capacity for decreased generation from affected fossil fuel-fired generating units.

While building block 1 relied on measures that could be applied directly to individual sources, building blocks 2 and 3 employed measures that were expressly designed to shift the balance of coal-, gas-, and renewable-generated power across the power grid.

2. Legal Challenges to the CPP, Executive Order 13783, and the EPA's Review of the CPP

On October 23, 2015, 27 states and a number of other parties sought judicial review of the CPP in the U.S. Court of Appeals for the D.C. Circuit.[9] After some preliminary briefing, the Supreme Court stayed implementation of the CPP, pending judicial review.[10] The case was then referred to an *en banc* panel of the D.C. Circuit, which held oral argument on September 27, 2016.

On March 28, 2017, President Trump issued Executive Order 13783, which affirms the ''national interest to promote clean and safe development of our Nation's vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.'' [11] The Executive Order directs all executive departments and agencies, including the EPA, to ''immediately review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law.'' [12] The Executive Order further affirms that it is ''the policy of the United States that necessary and appropriate environmental regulations comply with the law.'' [13] Moreover, the Executive Order specifically directs the EPA to review and initiate reconsideration proceedings to ''suspend, revise, or rescind'' the CPP ''as appropriate and consistent with law.'' [14]

In a document signed the same day as Executive Order 13783 and published in the **Federal Register** at 82 FR 16329 (April 4, 2017), the EPA announced that, consistent with the Executive Order, it was initiating its review of the CPP and providing notice of forthcoming proposed rulemakings consistent with the Executive Order.

In light of Executive Order 13783, the EPA's initiation of a review of the CPP, and notice of the EPA's forthcoming rulemakings, the EPA asked the D.C. Circuit to hold the CPP litigation in abeyance, and, on April 28, 2017, the court (still sitting en banc) granted motions to hold the cases in abeyance for 60 days and directed the parties to file briefs addressing whether the cases should be remanded to the Agency rather than held in abeyance.[15] Since then, the D.C. Circuit has issued a series of orders holding the cases in abeyance. While the case has been in abeyance, the EPA has been reviewing the CPP and providing status reports to the court describing the progress of its rulemaking.

In the course of the EPA's review of the CPP, the Agency also reevaluated its interpretation of CAA section 111, and, on that basis, the Agency proposed to repeal the CPP.[16]

3. Public Comment and Hearings on the Proposed Repeal

Publication of the Proposed Repeal in the **Federal Register** opened comment on the proposal for an initial 60-day

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[2] 42 U.S.C. 7411.

[3] *Id.* 7411(b)(1).

[4] The CPP identified ''[f]ossil fuel-fired EGUs'' as ''by far the largest emitters of GHGs among stationary sources in the U.S., primarily in the form of CO_2.'' 80 FR 64510, 64522 (October 23, 2015).

[5] Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units, 80 FR 64510, 64518 (October 23, 2015); *see also* Endangerment and Cause or Contribute Findings for Greenhouse Gases Under section 202(a) of the CAA, 74 FR 66496 (December 15, 2009) (2009 Endangerment Finding). The substance of the 2009 Endangerment Finding, which addressed GHG emissions from mobile sources, is not at issue in this action.

[6] 42 U.S.C. 7411(d)(1) (emphasis added).

[7] *See* 80 FR 64707.

[8] *Id.*

[9] *See West Virginia* v. *EPA,* No. 15–1363 (and consolidated cases) (D.C. Cir. October 23, 2015).

[10] *West Virginia* v. *EPA,* 136 S. Ct. 1000 (2016).

[11] *See* Executive Order 13783, section 1(a).

[12] *Id.* section 1(c).

[13] *Id.* section 1(e).

[14] *Id.* section 4(a)–(c).

[15] Order, Document No. 1673071 (per curiam).

[16] *See* Proposed Repeal, 82 FR 48035 (October 16, 2017).

public comment period. The EPA held public hearings on November 28 and 29, 2017, in Charleston, West Virginia, and then extended the public comment period until January 16, 2018. In response to requests for additional opportunities for oral testimony, the EPA held three listening sessions in Kansas City, Missouri; San Francisco, California; and Gillette, Wyoming. The EPA also reopened the public comment period until April 26, 2018, giving stakeholders 192 days to review and comment on the proposal. The EPA received more than 1.5 million comments on the Proposed Repeal.

B. Basis for Repealing the Clean Power Plan

1. Authority To Revisit Existing Regulations

The EPA's ability to revisit existing regulations is well-grounded in the law. Specifically, the EPA has inherent authority to reconsider, repeal, or revise past decisions to the extent permitted by law so long as the Agency provides a reasoned explanation. The authority to reconsider prior decisions exists in part because the EPA's interpretations of statutes it administers ''[are not] instantly carved in stone,'' but must be evaluated ''on a continuing basis.'' [17] This is true when, as is the case here, review is undertaken ''in response to . . . a change in administrations.'' [18] Indeed, ''[a]gencies obviously have broad discretion to reconsider a regulation at any time.'' [19]

2. Legal Basis for Repeal of the Clean Power Plan

The CPP departed from the EPA's traditional understanding of its authority under section 111 of the CAA and promulgated a rule in excess of its statutory authority. Because the CPP significantly exceeded the Agency's authority, it must be repealed.[20] Fundamentally, the CPP read the statutory term ''best system of emission reduction'' so broadly as to encompass measures the EPA had never before envisioned in promulgating performance standards under CAA section 111. In contrast to its traditional regulations that set performance standards based on the application of equipment and practices at the level of an individual facility, the EPA in the CPP set standards that could only be achieved by a shift in the energy generation mix at the grid level, requiring a shift from one type of fossil-fuel-fired generation to another, and from fossil-fuel-fired generation as a whole towards renewable sources of energy. The text of the CAA is inconsistent with that interpretation, and the context, structure, and legislative history confirm that the statutory interpretation underlying the CPP was not a permissible construction of the Act.

a. CAA Requirements and Background

In 1970, Congress enacted section 111(b) of the CAA, authorizing the EPA to promulgate ''standards of performance'' for new stationary sources in certain source categories.[21] Congress also directed the EPA, under CAA section 111(d), to ''prescribe regulations which shall establish a procedure'' [22] for states to establish standards [23] for existing sources of certain air pollutants to which a standard of performance would apply if such existing source were a new source.[24]

Since 1990, new- and existing-source CAA section 111 rulemakings have been governed by the same statutory definitions.[25] The CAA defines the term ''standard of performance'' in two sections. CAA section 111(a)(1) defines it, for purposes of section 111 (which contains the new- and existing-source performance standard authority in, respectively, CAA section 111(b) and 111(d)), as:

> a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.[26]

And CAA section 302(*l*) defines ''standard of performance'' as ''a requirement of continuous emission reduction, including any requirement relating to the operation or maintenance of a source to assure continuous reduction.'' [27]

EPA's role under CAA section 111(d) is narrow. Indeed, CAA section 111(d) tasks states with ''establish[ing] standards of performance for any existing source'' and ''provid[ing] for the implementation and enforcement of such standards of performance.'' It requires further that the regulations the EPA is directed to adopt must permit the state ''to take into consideration, among other factors, the remaining useful life of the existing source to which such standard [of performance] applies.'' [28] After all, Congress found that ''air pollution prevention . . . and air pollution control at its source is the primary responsibility of States and local governments.'' [29]

In contrast to CAA section 111(b) (where the EPA may directly establish performance standards for emissions from new sources), the EPA implements CAA section 111(d) by issuing regulations that it calls ''emission guidelines'' [30] These guidelines provide states with information to assist them in developing state plans establishing standards of performance for existing designated facilities within their jurisdiction that are submitted to the EPA for review. Such information includes the EPA's determination of the ''best system of emission reduction,'' which is commonly referred to as the BSER.

b. The Plain Meaning of CAA Sections 111(a)(1) and (d)

CAA section 111(d) provides that ''each State shall submit to the Administrator a plan which (A) establishes *standards of performance* for any existing source for [certain air pollutants] . . . and (B) provides for the implementation and enforcement of such standards of performance.'' [31] Given how Congress has defined the phrase ''standard of performance'' for purposes of CAA section 111, the plain meaning of CAA section 111(d), therefore is that states shall submit a plan which ''establishes [a standard for

[17] *Chevron U.S.A. Inc.* v. *NRDC, Inc.,* 467 U.S. 837, 863–64 (1984).

[18] *National Cable & Telecommunications Ass'n* v. *Brand X internet Services,* 545 U.S. 967, 981 (2005).

[19] *Clean Air Council* v. *Pruitt,* 862 F.3d 1, 8–9 (D.C. Cir. 2017).

[20] As noted above, the EPA received more than 1.5 million comments on the Proposed Repeal. The Agency's consideration of and responses to significant comments are reflected in section II.B.2 of this preamble.

[21] CAA Amendments of 1970, Public Law 91–604, 84 Stat. at 1683–84 (Dec. 31, 1970); *see also* 42 U.S.C. 7411(b).

[22] *See* section IV (addressing changes to the implementing regulations).

[23] As originally enacted, CAA section 111 required states to establish ''emission standards'' for existing sources, but Congress replaced that term with ''standard of performance'' as part of the CAA Amendments of 1977. *See* Public Law 95–95, 91 Stat. at 699 (Aug. 7, 1977) (''Section 111(d)(1) . . . is amended by striking out 'emissions standards' in each place it appears and inserting in lieu thereof 'standards of performance' '').

[24] CAA Amendments of 1970, 84 Stat. at 1684; see also 42 U.S.C. 7411(d).

[25] *See infra* n.51.

[26] 42 U.S.C. 7411(a)(1).

[27] 42 U.S.C. 7602(*l*).

[28] 42 U.S.C. 7411(d)(1).

[29] 42 U.S.C. 7401(a)(3).

[30] *See American Elec. Power Co.* v. *Connecticut,* 564 U.S. 410, 424 (2011). *See generally* Section IV, *infra* (discussing the promulgation of revised implementing regulations governing the EPA's issuance of emission guidelines); 40 CFR part 60, subpart B.

[31] 42 U.S.C. 7411(d)(1) (emphasis added).

emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the [BSER] . . .] for any existing source.''

While CAA section 111(a)(1) provides that the EPA determines the BSER upon which existing-source performance standards are based, Congress expressly limited the universe of systems of emission reduction from which the EPA may choose the BSER to those systems whose ''application'' to an ''existing source'' will yield an ''achievable'' ''degree of emission limitation.'' [32] ''[W]here . . . the statute's language is plain,'' courts explain, our '' 'sole function . . . is to enforce it according to its terms.' '' [33]

The EPA begins with the meaning of ''application,'' as it appears in CAA section 111(a)(1). In the absence of a statutory definition, the term must be construed in accordance with its ordinary or natural meaning.[34] Here the ordinary meaning of ''application'' refers to the ''act of applying'' or the ''act of putting to use.'' [35] Accordingly, a standard of performance must reflect the degree of emission limitation that can be achieved by putting the BSER into use. Furthermore, the ordinary and natural use of the term ''application,'' which is derived from the verb ''to apply,'' requires both a direct object and an indirect object. In other words, someone must apply *something* to *something else* (*e.g.,* the application of general rules to particular cases). In the case of CAA section 111, the direct object is the BSER. CAA section 111(d) also provides that the indirect object is the ''existing source''—''each State shall submit to the Administrator a plan which (A) establishes standards of performance *for any existing source*'' (emphasis added). The Act further defines an ''existing source'' as ''any stationary source other than a new source,'' [36] and in turn defines a ''stationary source'' as ''any building, structure, facility, or installation which emits or may emit any air pollutant.'' [37] Consequently, CAA section 111 unambiguously limits the BSER to those systems that can be put into operation *at* a building, structure, facility, or installation. Such systems include, for example, add-on controls (*e.g.,* scrubbers) and inherently lower-emitting processes/practices/designs.

Conversely, the plain language of CAA section 111 does not authorize the EPA to select as the BSER a system that is premised on application to the source category as a whole or to entities entirely outside the regulated source category. First, Congress specified that ''standards of performance'' are established ''for new sources *within such category*'' [38] and ''for any existing source.'' [39] CAA section 111, therefore, does not allow for the establishment of standards for the source category or for entities not within the source category. Instead, CAA section 111 standards must be established for individual sources. Second, because CAA section 111 standards reflect an ''achievable'' ''degree of emission limitation'' through application of the BSER, an owner or operator must be able to achieve an applicable standard by applying the BSER to the designated facility. Accordingly, the BSER—like standards of performance—cannot be premised on a system of emission reduction that is implementable only through the combined activities of sources or non-sources. Thus, the EPA is precluded from basing BSER on strategies like generation shifting and corresponding emissions offsets because these types of systems cannot be put into use at the regulated building, structure, facility, or installation.[40]

c. Statutory Structure and Purpose Confirm That a ''System of Emission Reduction'' Must Be Applied to an Individual Source and That CAA Section 111 is Intended to Best Design, Build, Equip, Operate, and Maintain Sources so as To Reduce Emissions

While the plain meaning of CAA section 111 provides that the BSER must be applied to a building, structure, facility, or installation, Congress' intent is also manifest in the statutory structure and purpose. ''Statutory construction,'' the Supreme Court instructs, ''is a holistic endeavor.'' [41] The interpretation of a phrase ''is often clarified by the remainder of the statutory scheme—because the same terminology is used elsewhere in a context that makes its meaning clear, or because only one of the permissible meanings produces a substantive effect that is compatible with the rest of the law.'' [42]

(1) The Statutory Structure Limits a ''System of Emission Reduction'' to ''Systems'' That Have a Potential for Application to an Individual Source

The conclusion that CAA section 111 standards are limited as described above is confirmed by considering the section's place in the overall statutory scheme. Congress tied CAA section 111 to the Best Available Control Technology (''BACT'') provisions in CAA section 165.[43] Section 165 provides that ''[a]ny major stationary source or major modification subject to [preconstruction requirements] must conduct an analysis to ensure the application of [BACT].'' [44] A permitting authority must ''conduct a BACT analysis on a case-by-case basis . . . and must evaluate the amount of emission reductions that each available emissions-reducing *technology or technique* would achieve, as well as the energy, environmental, economic and other costs . . . .'' [45] The EPA has long recommended that permitting agencies conduct this analysis through a top-down assessment of the best available and feasible control technologies for the emissions subject to BACT.[46] ''Based on

[32] *Id.*

[33] *Air Line Pilots Ass'n* v. *Chao,* 167 F.3d 602, 791 (D.C. Cir. 2018) (quoting *United States* v. *Ron Pair Enterprises,* 489 U.S. 235, 241 (1989)).

[34] *See Leocal* v. *Ashcroft,* 543 U.S. 1, 10 (2004).

[35] Merriam-Webster's Collegiate Dictionary (11th ed. 2003) (''1: an act of applying: a (1) : an act of putting to use <~ of new techniques> (2) : a use to which something is put <new ~s for old remedies>''). Definitions are also provided from when CAA section 111(a)(1) was last amended, *see* The Oxford English Dictionary (2d ed. 1989) (''The action of applying; the thing applied. 1. a. The action of putting a thing to another, of bringing into material or effective contact''), and first enacted, *see* American Heritage Dictionary of the English Language (2d ed. 1969) (''1. The act of applying or putting something on. 2. Anything that is applied, such as a cosmetic or curative agent. 3. The act of putting something to a special use or purpose.'').

[36] 42 U.S.C. 7411(a)(6).

[37] 42 U.S.C. 7411(a)(3).

[38] 42 U.S.C. 7411(b)(1)(B) (requiring the Administrator to establish performance standards ''for new sources *within such category*'' rather than for the category itself as a whole) (emphasis added)

[39] 42 U.S.C. 7411(d)(1)(A).

[40] The CPP's BSER was in part designed to consist of generation-shifting. *See, e.g.,* 80 FR 64,776 (final rule) (describing 'building blocks' 2 and 3 as ''processes of shifting dispatch from steam generators to existing NGCC units and from both steam generators and NGCC units to renewable generators.'').

[41] *Czyzewski* v. *Jevic Holding Corp.,* 137 S. Ct. 973, 985 (2017) (citing *United Savings Ass'n* v. *Timbers of Inwood Forest Associates,* 484 U.S. 365, 371 (1988)).

[42] *Utility Air Regulatory Group* v. *EPA,* 573 U.S. 302, 321 (2014).

[43] 42 U.S.C. 7479(3) (''In no event shall application of 'best available control technology' result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 or 7412 of this title.'').

[44] U.S. EPA, DRAFT New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting, B. 1 (October 1990) (''NSR Manual''), *available at https://www.epa.gov/sites/production/files/2015-07/documents/1990wman.pdf.* Though the EPA never finalized this draft, it continues to follow the analytical approach to the BACT analysis contained within the NSR Manual. *See also* U.S. EPA, PSD and Title V Permitting Guidance for Greenhouse Gases (March 2011) (''GHG Permitting Guidance''), *available at https://www.epa.gov/sites/production/files/2015-07/documents/ghgguid.pdf.*

[45] GHG Permitting Guidance at 17 (emphasis added).

[46] *See id.* at 17–44.

this [technology] assessment, the permitting authority must [then] establish a numeric emission limitation that reflects the maximum degree of reduction achievable. . . .'' [47]

In no event, Congress specified, can application of BACT result in greater emissions than allowed by ''any applicable standard established pursuant to section [1]11 or [1]12 . . . .'' [48] To ensure such an exceedance does not occur, NSPS serve as the base upon which BACT determinations are made and are commonly viewed as the BACT ''floor.'' [49] However, because Congress refers to ''any applicable standard established pursuant to section [1]11,'' without reference to either subsection (b) or (d), any applicable existing source standard would also function as a BACT ''floor.'' [50]

The EPA has consistently taken the position that BACT encompasses ''all 'available' control options . . . that have the potential for practical *application to the emissions unit* and the regulated pollutant under evaluation.'' [51] This is so because BACT reflects a level of control that the permitting agency ''determines is achievable *for such facility* through *application of* production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control.'' [52] Put simply, both the statutory text and the EPA's long-standing interpretation provide that BACT is limited to control options that can be applied to the source itself and does not include control options that go beyond the source.

Because CAA section 111 operates as a floor to BACT, section 111 cannot be interpreted to offer a broader set of tools than are available under section 165. Also, because BACT is limited to control options that are applied to an individual source, so too with section 111. The explicit statutory link of CAA section 111 standards to BACT, the statutory definition of the latter, the Agency's consistent position that BACT must apply to and be achievable for a particular facility, and the text of CAA section 111(b) and 111(d), confirm the conclusion that the text of 111(a)(1) can only be read to mean that standards of performance (and the BSER on which they are predicated) are likewise measures applied to individual facilities.

(2) The Purpose of CAA Section 111 is To Design, Build, Equip, Operate, and Maintain Individual Sources so as To Reduce Emissions

Congress intended that CAA section 111 would set minimum requirements [53] on individual sources to be designed, built, equipped, operated, and maintained to reduce emissions. This purpose is evidenced in the history of CAA section 111(a)(1)'s text and corroborated by legislative history. CAA section 111 was originally enacted as part of the 1970 CAA Amendments. In that enactment, state plans under CAA section 111(d) were to establish ''emission standards'' rather than ''standards of performance.'' The EPA's CAA section 111(d) implementing regulations, issued in 1975, provided that, in the case of existing sources, the EPA would issue ''emissions guidelines,'' that these guidelines would ''reflect the degree of emission reduction achievable through the application of the [BSER] which (taking into account the cost of such reduction) the Administrator has determined has been adequately demonstrated for designated facilities,'' and that state plans establishing standards of performance for existing sources would be developed in light of these guidelines.[54] Then in 1977, Congress replaced the term ''emission standard'' under CAA section 111(d) with the phrase ''standard of performance''—a phrase defined for all of CAA section 111 in section 111(a)(1). Thus, the history behind CAA section 111(a)(1) is relevant to understanding EPA's authority for both sections 111(b) and (d).

The 1970 enactment of CAA section 111 represents a choice between two alternative approaches to direct federal regulation of stationary sources. Under the House bill, the Administrator would have been authorized to establish ''emission standards'' for new sources of pollutants that may contribute substantially to endangerment of the public health or welfare. These standards would have ''require[d] that new sources of such emissions be *designed and equipped* to maximize emission control insofar as technologically and economically feasible.'' [55] The House bill did not contain any analogous provisions for existing sources. Nevertheless, the House bill contemplated that under CAA section 111, individual sources would be designed to emit less.

Under the Senate approach, the Administrator would have established

[47] *Id.* at 17, 44–46.

[48] 42 U.S.C. 7479(3).

[49] GHG Permitting Guidance, 25 n.64 (''While this guidance is being issued at a time when no NSPS have been established for GHGs, permitting authorities must consider any applicable NSPS as a controlling floor in determining BACT once any such standards are final.'').

[50] Accordingly, certain commenters incorrectly argue that the scope of CAA section 169 is irrelevant to regulating existing sources under CAA section 111(d) because *only* CAA section 111(b) standards (*i.e.,* NSPS), not CAA section 111(d) existing-source standards, apply to sources subject to BACT. However, both CAA section 111(b) and (d) rely on the same definition of ''standard of performance'' in CAA section 111(a), and the term's statutory history (that is, its evolution through repeated acts of Congress from 1970 to 1990) supports the conclusion that Congress intended for the term to have the same meaning under both programs. Between the 1970 and 1977 CAA Amendments, ''standards of performance'' applied only to the regulation of new sources under CAA section 111(b); existing sources, on the other hand, were required to meet ''emission standards,'' which was an undefined term. *See* Public Law 91–604, 84 Stat. at 1683–84. Between the 1977 and 1990 CAA Amendments, CAA section 111(a)(1) provided three context-specific definitions: One definition applied to *all* new stationary sources regulated under CAA section 111(b) (basing standards on the best technological system of continuous emission reduction (''TSCER'')); the second applied only to new *fossil-fuel-fired* sources regulated under CAA section 111(b) (basing standards on the TSCER *and* requiring a percent reduction in emissions); and a third applied to *existing* sources regulated under CAA section 111(d) (basing standards on the best system of continuous emission reduction). *See* Public Law 95–95, 91 Stat. at 699–700. In 1990, however, Congress replaced the three separate definitions with a singular definition of ''standard of performance'' under CAA section 111(a)(1), to apply throughout CAA section 111, based on application of the BSER. *See* Public Law 101–549, 104 Stat. at 2631. The legislative history of CAA section 111 demonstrates that Congress knew full well how to require either that the regulations applying to new and existing sources would be different in definition and scope (as in both the 1970 and 1977 versions of the Act) or that they would be the same and demonstrates that in 1990 they plainly chose the latter course.

[51] GHG Permitting Guidance, 24 (emphasis added).

[52] 42 U.S.C. 7479(3) (emphasis added).

[53] In a 1978 BACT guidance document, the EPA explained that performance standards reflect emission limits ''which can reasonably be met by all new or modified sources in an industrial category, even though some individual sources are capable of lower emissions. Additionally, because of resource limitations in the EPA, revision of new source standards must lag somewhat behind the evolution of new or improved technology. Accordingly, new or modified facilities in some source categories may be capable of achieving lower emission levels that [sic] NSPS without substantial economic impacts. The case-by-case BACT approach provides a mechanism for determining and applying the best technology in each individual situation. Hence, NSPS and NESHAP are Federal guidelines for BACT determinations and establish minimum acceptable control requirements for a BACT determination.'' U.S. EPA, Guidelines for Determining Best Available Control Technology, 3 (December 1978).

Further, while some commenters suggest that the BSER must reflect the ''greatest degree of emission control,'' citing to section 113 of Senate bill 4358 (S. 4358, at 6, 1970 Legis. Hist. at 554–55), Congress imposed no such requirement. *See Sierra Club,* 657 F.2d at 330 (''we believe it is clear that this language is far different from the words Congress would have chosen to mandate that the EPA set standards at the maximum degree of pollution control technologically achievable.'').

[54] 40 FR 53346.

[55] H.R. Conf. Rep. No. 91–1783, 46 (December 17, 1970) (emphasis added).

''standards of performance'' for new sources based ''on the greatest emission control possible through application of [the] latest available control technology.'' [56] This would have ensured ''that new stationary sources are *designed, built, equipped, operated, and maintained* so as to reduce emission[s] to a minimum.'' [57] Accordingly, such standards would have reflected ''the degree of emission control which can be achieved through process changes, operation changes, direct emission control, or other methods.'' [58] A separate provision governing emissions of ''selected agents'' authorized the Administrator to develop ''emission standards'' for both new and existing sources.[59] However, the Senate ''recognize[d] that certain old facilities may use equipment and processes which are not suited to the application of control technology. The [Administrator] would be authorized therefore to waive the application of standards . . . .'' [60]

The conference substitute settled on the language largely reflected in the current wording of CAA section 111(a)(1); the differences between the 1970 enactment and the current version are not relevant to this discussion. As explained above, *both* the Senate and House bills contemplated only control measures that would lead to better design, construction, operation, and maintenance of an individual source [61] and, in the case of existing sources under the Senate bill, the waiver of standards if certain sources could not apply new control technologies. Accordingly, recognizing that a ''system of emission reduction'' is limited to control technologies or techniques that can be integrated into an individual source's design or operation (*i.e.,* add-on controls and lower-emitting processes/practices/designs) is the only interpretation compatible with the fundamental principle, reflected in the original competing drafts of the provision, that sources should be designed, built, equipped, operated, and maintained to reduce emissions.[62]

d. The CPP Unlawfully Exceeds the Scope of CAA Section 111(a)(1) and Must Be Repealed

Before the CPP, the EPA had issued only six CAA section 111(d) rulemakings, in the form of a ''guideline document'' with corresponding ''emission guidelines.'' [63] Conversely, the EPA has issued around seventy CAA section 111(b) rulemakings, including several for new fossil-fuel-fired steam-generating units.[64] Every one of those rulemakings applied technologies, techniques, processes, practices, or design modifications directly to individual sources.

In the CPP, the EPA determined that the BSER for reducing CO_2 emissions from existing fossil fuel-fired power plants was the combination of three ''building blocks'':

1. Improving heat rate at individual affected coal-fired steam generating units;

2. Substituting increased generation from lower-emitting existing natural gas combined cycle units for decreased generation from higher-emitting affected steam generating units; and

3. Substituting increased generation from new zero-emitting renewable energy generating capacity for decreased generation from affected fossil fuel-fired generating units.

This was the first time the EPA interpreted the BSER to authorize measures wholly outside a particular source.[65] The EPA reached this determination by interpreting the statutory term ''application'' as if it instead read ''implementation'' (without pointing to any legal basis for equating those terms), and interpreting the phrase ''system of emission reduction'' broadly as ''a set of measures that work together to reduce emissions and that are implementable by the sources themselves.'' [66] ''As a practical matter,'' the Agency continued, ''the 'source' includes the 'owner or operator' of any building, structure, facility, or installation for which a standard of performance is applicable.'' [67] The EPA then concluded that the breadth of a dictionary definition of the word ''system'' established the bounds of its statutory authority, finding that the phrase '' 'system of emission reduction' . . . means a set of measures that source owners or operators can implement to

[56] *Id.* (describing the approach under the Senate amendment).

[57] S. Rep. No. 91–1196, 15–16 (September 17, 1970) (emphasis added).

[58] *Id.* at 17.

[59] *Id.* at 18–19.

[60] *Id.* at 19.

[61] References to ''other alternatives,'' ''other means,'' or ''other methods'' in the Senate bill and accompanying report are not evidence that Congress intended to confer boundless discretion. In fact, these terms must be interpreted in light of the other specifically listed control techniques. For example, the Senate bill's reference to ''control technology,'' ''processes,'' and ''operating methods'' are properly read to denote measures that can be applied to individual sources—and ''other alternatives'' must be interpreted *ejusdem generis:* in the same fashion.

[62] To be sure, the Agency does not contend that a ''system of emission reduction'' is limited to technological improvements. Indeed, the CAA Amendments of 1990 make clear that CAA section 111 is not to be limited to ''technological systems.'' *See supra* n. 51 (discussing amendments to CAA section 111(a)(1)). But that does not mean CAA section 111 therefore authorizes basing BSER on generation shifting ''measures,'' such as substitute generation from lower- or non-polluting power plants, which cannot be applied to individual sources like add-on controls or inherently lower-emitting processes/practices/designs.

[63] (*See* 1) Phosphate Fertilizer Plants, Final Guideline Document Availability, 42 FR 12022 (March. 1, 1977) [Final Guideline Document: Control of Fluoride Emissions from Existing Phosphate Fertilizer Plants, March 1977, Doc. No. EPA–450/2–77–005]; 2) Emission Guideline for Sulfuric Acid Mist, 42 FR 55796 (October 18, 1977); 3) Kraft Pulp Mills; Final Guideline Document; Availability, 44 FR 29828 (May 22, 1979) [Kraft Pulping, ''Control of Emissions from Existing Mills,'' March 1979, Doc. No. EPA–450/2–78–003b]; 4) Primary Aluminum Plants; Availability of Final Guideline Document, 45 FR 26294 (Apr. 17, 1980) [Primary Aluminum: Guidelines for Control of Fluoride Emissions from Existing Primary Aluminum Plants, December 1979, Doc. No. EPA–450/2–78–049b]; 5) Standards of Performance for New Stationary Sources and Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills, 61 FR 9905 (March 12, 1996); and 6) Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 FR 28606 (May 18, 2005) (hereafter, the Clean Air Mercury Rule or CAMR) (vacated in *New Jersey* v. *EPA,* 517 F.3d 574 (D.C. Cir. 2007) (reviewing an action that sought to shift regulation of certain emissions from power plants from the CAA section 112 hazardous air pollutants regime to the section 111 standards regime and holding that the EPA failed to comply with the delisting requirements of section 112(c)(9) and thus vacating the corresponding section 111 standards for electric utility steam generating units). This list of six CAA section 111(d) rulemakings does not include any guideline documents mandated by and carried out in compliance with CAA section 129 (governing solid waste incinerator units).

[64] *See generally* 40 CFR part 60, subparts D–TTTT. In fact, steam-generating units were among the first sources regulated under section 111(b). *See* 36 FR 24876 (December 23, 1971) (promulgating standards for steam generators, portland cement plants, incinerators, nitric acid plants, and sulfuric acid plants).

[65] CAMR, which relied in part on a cap-and-trade mechanism, was still ultimately ''based on control technology available in the relevant timeframe,'' an approach fundamentally different than the CPP's second and third ''building blocks,'' which were not based on systems that could be applied to or at individual sources. Indeed, the rule explained that the BSER refers to ''the combination of the cap-and-trade mechanism *and the technology needed* to achieve the chosen cap level.'' 70 FR 28620 (emphasis added). Accordingly, the Agency concluded that it would be ''reasonable to establish a cap on [the basis of using a particular technology] and require compliance with that cap at a later point in time when the necessary technology becomes widely available.'' *Id.* To the extent that CAMR's BSER (*i.e.,* the combined control technology and cap-and-trade program) is premised on application to the source category (as opposed to an individual source), however, CAMR would be unlawful. Trading as a compliance mechanism under CAA section 111 is discussed in section III.F.2.a of this preamble.

[66] 80 FR 64762 (citing the Oxford Dictionary of English (3rd ed.) (2010), among others). The EPA reached this interpretation in part on the assumption that ''the terms 'implement' and 'apply' are used interchangeably.'' *See* Legal Memorandum Accompanying Clean Power Plan for Certain Issues at 84 n.175.

[67] 80 FR 64762.

achieve an emission limitation applicable to their existing source.'' [68]

In reviewing the CPP, the EPA concludes that the interpretation relied upon in the CPP ignored or misinterpreted critical statutory elements and rules of statutory construction. After reconsidering the relevant statutory text, structure, and purpose, the Agency now recognizes that Congress ''spoke to the precise question'' of the scope of CAA section 111(a)(1) and clearly precluded the unsupportable reading of that provision asserted in the CPP. Accordingly, this action repeals the CPP.[69]

(1) The CPP Is Impermissibly Based on ''Implementation'' Rather Than ''Application'' of the BSER

CAA section 111(a)(1) provides that standards of performance reflect an emission limitation achievable ''through the application of the [BSER] . . . .'' In the Legal Memorandum accompanying the CPP, the Agency stated in a footnote that ''the terms 'implement' and 'apply' are used interchangeably.'' [70] Thus, the Agency decided, ''the system must be limited to measures that can be implemented—''appl[ied]''—by the sources themselves . . . .'' [71] But Congress does not in fact use these terms interchangeably in the Act, and in CAA section 111(a)(1), as in other source-focused standard-setting provisions in the Act, used a term (''application'') meaningfully different than the one CPP read into that section (''implementation'')—and the term that Congress actually used is one that reflects the CAA's other source-focused standard-setting provisions.[72]

The Act is replete with provisions calling for the ''implementation'' of ''a system,'' [73] ''control measures,'' [74] ''emission reduction measures,'' [75] and even ''steps, *by owners or operators of stationary sources,*'' [76] but CAA section 111(a)(1) is not among them. Congress defines ''implementing'' under CAA section 105(a)(1)(A) as ''any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs [for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards].'' [77] But again, ''applying'' is not included in this list defining ''implementing.'' In the case of the Act's standard-setting provisions, on the other hand, BACT and maximum achievable control technology (MACT) requirements—like CAA section 111—are based on ''application of'' control measures to individual sources.

Functionally, the two terms send different signals. ''Implementation'' requires a subject and direct object (I implement the plan), whereas ''application'' requires a subject, direct object, and indirect object (I apply the protocol to the subject). That is, an owner or operator can implement a system (without anything more and without any particular object of the system being implied), but an owner/operator must apply a system *to* another object (*i.e.,* the source). CAA section 111 illustrates this distinction. Congress provided, in CAA section 111(d)(1), that state plans must provide ''for the implementation and enforcement of such standards of performance,'' but that EPA's regulations must also permit a state ''in applying a standard of performance to any particular source'' to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies. Thus, whereas state plans more broadly ''implement'' the CAA section 111(d) program, states ''appl[y]'' standards to individual sources. Congress could have defined a standard of performance as reflecting the ''implementation of the BSER by the owner or operator of a stationary source,'' but Congress did not. Simply put, equating the terms ''implement'' and ''apply'' conflicts with the plain language of CAA section 111(a)(1) and their use throughout the Act; this conflict is compounded by the conflation of the source with its owner, different concepts that are separately defined, *see* CAA section 111(a)(3), (5).

Now take generation shifting, the basis for the second and third ''building blocks'' of the CPP's BSER. The CPP recognized that an owner or operator of a regulated source can ''shift'' power-producing operations to a different facility, such as a nuclear power plant, through bilateral contracts for capacity or by reducing utilization. But just because generation shifting is ''implementable'' by an owner or operator (*i.e.,* just because an owner or operator of a given source can subsidize generation elsewhere that will reduce demand for generation from that) does not mean that generation shifting can be ''applied'' to the source.[78] And indeed, the CPP shifted generation from one regulated source category to another and from both those regulated source categories together to other forms of electricity generation outside any regulated source category. Because the CPP is premised on ''implementation of the BSER by a source's owner or operator'' and not ''application of the [BSER]'' to an individual source, the rule contravenes the plain language of CAA section 111(a)(1) and must be repealed.

[68] *Id.* The EPA acknowledged, nonetheless, that ''regulatory requirements'' in the CPP would be based ''on measures the affected EGUs can implement to assure that electricity is generated with lower emissions'' and that ''do not require reductions in the total amount of electricity produced.'' *Id.* at 64778. But the EPA did not exclude such ''measures'' (*i.e.,* reduced utilization and demand-side energy efficiency) as being outside the scope of the dictionary definition of ''system.'' Indeed, the EPA believed they would play an important compliance role under the CPP. *See id.* at 64753–657 (discussing reduced utilization and demand-side energy efficiency measures under rate-based and mass-based state plans). *See also* n. 83, *infra.*

[69] One commenter asserted that, rather than repeal the CPP, the EPA should retain building block 1. As explained in the Proposed Repeal, however, while heat rate improvement measures may be considered in a CAA section 111 standard, ''building block 1, as analyzed, cannot stand on its own. 80 FR 64758 n. 444; see also *id.* at 64658 (discussing severability of the building blocks).'' 82 FR 48039 n.5. Accordingly, today's action repeals the whole of the CPP and does not retain building block 1 as the BSER. In any case, as discussed in the ACE proposal, ''building block 1, as constructed in [the] CPP, does not represent an appropriate BSER, and ACE better reflects important changes in the formulation and application of the BSER in accordance with the CAA.'' 83 FR 44756 (discussing the EPA's change in approach to analyzing heat rate improvement measures). See section III for the EPA's evaluation of heat rate improvement measures under ACE.

[70] Legal Memorandum Accompanying Clean Power Plan for Certain Issues at 84 n.175.

[71] 80 FR 64720.

[72] *See, e.g.,* 42 U.S.C. 7412(d)(2) (describing MACT as ''through application of measures, processes, methods, systems or techniques including, but not limited to, measures which—(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications, (B) enclose systems or processes to eliminate emissions, (C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point, (D) are design, equipment, work practice, or operational standards . . . , or (E) are a combination of the above;''); *id.* at 7479(3) (describing BACT as ''achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control'').

[73] 42 U.S.C. 7412(r)(7)(H)(vii) (''the Administrator . . . shall develop and implement a system for providing off-site consequence analysis information'').

[74] *Id.* 7511a(b)(2) (''Such plan provisions shall provide for the implementation of all reasonably available control measures'').

[75] *Id.* 7412(i)(5)(C) (''prior to implementation of emissions reduction measures'').

[76] *Id.* 7410(a)(2)(F) (emphasis added) (''require, as may be prescribed by the Administrator—(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources'').

[77] 42 U.S.C. 7405(a)(1)(A).

[78] A contract, for example, is neither a ''system'' nor ''applied to'' a source.

(2) Dictionary Definitions Cannot Confer an ''Infinitude'' of Possibilities

Although the word ''system'' is not defined in the CAA, ''[t]he meaning—or ambiguity—of certain words or phrases may only become evident when placed in context.'' [79] Thus, the issue is not whether the dictionary provides a broad definition of the word ''system,'' but what are the permissible bounds of the *legal* meaning of the word ''system.'' The precise question in this case is whether the word ''system'' as used in CAA section 111 encompasses any ''set of measures'' [80] to reduce emissions, or whether it is limited to lower-emitting processes, practices, designs, and add-on controls that are applied at the level of the individual facility.

''System,'' as used in CAA section 111, cannot be read to encompass *any* ''set of measures'' that would—through some chain of causation—lead to a reduction in emissions. As an initial matter, Congress did not use the phrase ''set of measures'' in CAA section 111. On its own, this phrase could create unbounded discretion in the Agency. Moreover, even when the term ''measures'' is used elsewhere in the Act, it is intended to be limited. For example, CAA section 112 emission standards are derived ''through application of *measures,* processes, methods, systems or techniques.'' ''Measures,'' are further defined to include measures which:

- Reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications,
- enclose systems or processes to eliminate emissions,
- collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point,
- are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in subsection (h) of CAA section 111, or
- are a combination of the above.[81]

''Measures,'' as Congress provides, are limited to control measures that can be integrated into an individual source's design or operation. ''Measures'' do not include shifting production away from the regulated source. The CPP read ''system'' in CAA section 111(a)(1) to mean any ''set of measures,'' relying on the dictionary, and then determined that there was no limitation on those ''set of measures'' so long as they were measures that could be implemented through obligations placed on the owner or operator of a source.[82] At both steps, the CPP relied on an absence of an express textual commandment forbidding these open-ended interpretations. That methodology is untenable.

Construing ''system'' to offer such an ''infinitude'' [83] of possibilities would have significant implications. The fact is, fossil fuel-fired EGUs operate within an interconnected ''system.'' Thus, any action that would affect electricity rates will have generation-shifting and potentially emission-reduction consequences. By the very nature of the interconnected grid, EPA's authority to determine the BSER under CAA section 111 is, under the Agency's prior interpretation, stretched to every aspect of the entire power sector. This cannot have been the intent of the Congress that enacted CAA section 111.

The D.C. Circuit has previously disapproved of a federal agency's expansive reading of its authority in analogous circumstances. In *Cal ISO,* the D.C. Circuit vacated the Federal Energy Regulatory Commission's (''FERC'') attempt to reform a utility's governing structure on the theory that FERC's statutory authority over ''practice[s] . . . affecting [a] rate'' gave FERC ''authority to regulate anything done by or connected with a regulated utility, as any act or aspect of such an entity's corporate existence could affect, in some sense, the rates.'' [84]

Upholding FERC's interpretation of ''practice'' to include replacing the governing board of California's Independent System Operator Corporation, the Court warned, could authorize FERC to ''dictate the choice of CEO, COO, and the method of contracting for services, labor, office space, or whatever one might imagine . . . .'' [85] But where ''the text *and reasonable inferences from it* give a clear answer . . . that . . . is 'the end of the matter.' '' [86] There is no need, therefore, to consider ''such parade of horribles.'' [87]

The Court explained that, ''no matter how important the principle of ISO independence is to the Commission, '[the FERC Order] is merely a regulation,' and cannot be the basis to override the limitations of 'statutes enacted by both houses of Congress and signed into law by the president.'' [88] The court reasoned that both ''the history of the application of this and similar statutes and by the implications of FERC's amorphous defining of the term'' firmly barred FERC's attempt to stretch its authority.[89] On this point, Congress's intent is ''crystal clear''—FERC had no authority to ''reform and regulate the governing body of a public utility under the theory that corporate governance constitutes a 'practice' for ratemaking authority purposes.'' [90]

The EPA's prior interpretation underlying the CPP is untenable for the same reasons. The EPA began, like FERC, with an ordinary statutory term (''system'') and then read into it maximally broad authority to shift generation away from coal-fired and gas-fired power plants to other electricity producers on the basis that generation shifting would cause those regulated sources to be displaced and therefore not be a source of emissions. But for nearly 45 years prior to the CPP, this Agency had never understood CAA section 111 to confer upon it the implicit power to restructure the utility industry through generation-shifting measures. Indeed, the EPA has issued many rules under CAA section 111 (both the limited set of existing-source rules under CAA section 111(d) and the much larger set of new-source rules under CAA section 111(b)). In all those rules, the EPA determined that the BSER consisted of add-on controls or lower-emitting processes/practices/designs that can be applied to individual sources.[91]

The CPP deviated from this settled understanding of CAA section 111. By embracing an expansive dictionary definition of ''system,'' [92] the EPA ignored that the text and structure of the Act expressly limited the scope of the term ''system'' in a way that foreclosed the CPP's expansive definition. The Agency concluded that actions that would cause generation to shift from higher-emitting to lower- or non-

[79] *King* v. *Burwell,* 135 S. Ct. 2480, 2489 (2015) (quoting *FDA* v. *Brown & Williamson Corp.,* 529 U.S. 120, 132 (2000)).

[80] 80 FR 64762.

[81] 42 U.S.C. 7412(d)(2).

[82] The CPP identified purported limitations to the underlying legal interpretation (*e.g.,* ''system'' does not extend to measures that directly target consumer behavior), *see* 80 FR 64776–779, but those purported limitations still led to an interpretation that far exceeded the bounds of the authority actually conferred by Congress on the EPA.

[83] *See Cal. Indep. Sys. Operator Corp.* v. *FERC,* 372 F.3d 395, 401 (D.C. Cir. 2004) (''*Cal ISO*'').

[84] *Id.*

[85] *Id.* at 403.

[86] *Id.* at 401 (citing *Brown* v. *Gardiner,* 513 U.S. 115, 120 (1994)) (emphasis in original).

[87] *Id.* at 403.

[88] *Id.* at 404.

[89] *Id.* at 402.

[90] *Id.*

[91] See *supra* n. 66 (discussing CAMR).

[92] 80 FR at 64720 (defined by the Oxford Dictionary of English as ''a set of things or parts forming a complex whole; a set of principles or procedures according to which something is done; an organized scheme or method; and a group of interacting, interrelated, or independent elements'').

emitting power generators represent a means of reducing CO_2 emissions from existing fossil fuel-fired electric generating units—and thus constituted a ''system'' within the meaning of CAA section 111. Taken to its logical end, however, any action affecting a generator's operating costs could impact its order of dispatch and lead to generation shifting. This could include, for example, minimum wage requirements or production caps. It is axiomatic that ''Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes.'' [93] Because Congress clearly did not authorize CAA section 111 standards to be based on *any* ''set of measures,'' the EPA need not address the potential consequences of deviating from our historical practice under CAA section 111 when determining whether the CPP's interpretation was a permissible reading of the statute. Like the D.C. Circuit in *Cal ISO,* the EPA concludes that the text and reasonable inferences from it give a clear answer: ''system'' does not embody any conceivable ''set of measures'' that might lead to a reduction in emissions, but is limited to measures that can be applied to and at the level of the individual source

(3) Basing BSER on Generation Shifting Is Not Authorized by Congress

On the question of whether basing BSER on generation shifting is precluded by the statute, the major question doctrine instructs that an agency may issue a major rule only if Congress has *clearly* authorized the agency to do so. As the Supreme Court has stated, ''We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast 'economic and political significance.' '' [94] Although the Court has not articulated a bright-line test, its cases indicate that a number of factors are relevant in distinguishing major rules from ordinary rules: ''the amount of money involved for regulated and affected parties, the overall impact on the economy, the number of people affected, and the degree of congressional and public attention to the issue.'' [95]

While the EPA believes that today's action is based on the only permissible reading of the statute and would reach that conclusion even without consideration of the major question doctrine, the EPA believes that that doctrine should apply here and that its application confirms the unambiguously expressed intent of CAA section 111. The CPP is a major rule. At the time the CPP was promulgated, its generation-shifting scheme was projected to have billions of dollars of impact on regulated parties and the economy, would have affected every electricity customer (*i.e.,* all Americans), was subject to litigation involving almost every State in the Union, and, as discussed in the following section, would have disturbed the state-federal and intra-federal jurisdictional scheme. Building blocks 2 and 3 are far afield from the core activity of CAA section 111—indeed, no section 111 rule of the scores issued has ever been based on generation shifting since the enactment of CAA section 111 in 1970. Because the CPP is a major rule, the interpretative question raised in CAA section 111(a)(1) (*i.e.,* whether a ''system of emission reduction'' can consist of generation-shifting measures) must be supported by a clear-statement from Congress.[96] As explained above, however, it is not—indeed, Congress has directly spoken to this precise question and precluded the interpretation of CAA section 111 advanced by the EPA in the CPP.

Further evidence comes from the notable absence of a valid limiting principle to basing a CAA section 111 rule on generation shifting. In the CPP, the EPA explained that the Agency ''has generally taken the approach of basing regulatory requirements on controls and measures designed to reduce air pollutants from the production process without limiting the aggregate amount of production.'' [97] But by shifting focus to the entire grid (which includes regulated sources and non-sources), the Agency could empower itself to order the wholesale restructuring of any industrial sector (whether or not it has authority to even regulate all the actors within that sector—so long, in keeping with the interpretation underlying the CPP, as it can place obligations on the owners and operators over whom it does have authority to carry out a ''system'' that goes beyond the EPA's actual direct reach). Appealing to such factors as ''cost'' and ''feasibility'' [98] as putative constraints on EPA's authority, furthermore, does not provide any assurance—indeed, the D.C. Circuit traditionally ''grant[s] the [A]gency a great degree of discretion in balancing them.'' [99] Thus, it is not reasonable to find in this statutory scheme Congressional intent to endow the Agency with discretion of this breadth to regulate a fundamental sector of the economy.

As a final point, the CPP not only advanced a broad reading of CAA section 111(a)(1), the rule applied that interpretation to ''the source category as a whole'' [100] to cause a reduction in coal-fired generation.[101] To do so, the CPP relied on ''emission reduction approaches that focus on the machine as a whole—that is, the overall source category—by shifting generation from dirtier to cleaner sources in addition to emission reduction approaches that focus on improving the emission rates of individual sources.'' [102] Consequently, it was designed as ''an emission guideline for an entire category of existing sources . . . .'' [103] However, by acting as a guideline for an entire category, the CPP ignored the statutory directive to establish standards *for* sources and overextended federal authority into matters traditionally reserved for states: ''administration of integrated resource planning and . . . utility generation and resource portfolios.'' [104]

(4) Basing BSER on Generation Shifting Encroaches on FERC and State Authorities

The Federal Power Act (FPA) establishes the dichotomy between federal and state regulation in the electricity sector by drawing ''a bright line easily ascertained, between state and federal jurisdiction.'' [105] The Supreme Court recently observed that, under the FPA, FERC has ''exclusive jurisdiction over wholesale sales of electricity in the interstate market'' and

[93] *Whitman* v. *American Trucking,* 531 US 457, 466 (2001). *See also* Letter from Neil Chatterjee, Chairman, Fed. Energy Reg. Comm'n, to Andrew Wheeler, Administrator, EPA at 5 (Oct. 31, 2018) (Docket ID# EPA–HQ–OAR–2017–0355–24053) (''The Supreme Court has explained several times that Congress 'does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes.' The challenges posed by global climate change present 'question[s] of deep 'economic and political significance' that [are] central to [the] statutory scheme[s]' administered by both the Agency and the Commission.'') (internal citation omitted).

[94] *Utility Air Regulatory Group* v. *EPA,* 573 U.S. 302, 324 (2014) (quoting *Brown & Williamson,* 529 U.S. at 159).

[95] *U.S. Telecom Ass'n* v. *FCC, 855 F.3d 381,* 422–23 (D.C. Cir. 2017) (internal citations omitted).

[96] The EPA acknowledges that for the reasons noted above, its position on this major rule issue has evolved since the EPA addressed it in the CPP, 80 FR 64,783. *See FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502 (2009).

[97] 80 FR 64762.

[98] *See* Legal Memorandum Accompanying Clean Power Plan for Certain Issues at 117–20.

[99] *Lignite Energy Council* v. *EPA,* 198 F.3d 930, 933 (D.C. Cir. 1999).

[100] 80 FR 64727.

[101] *Id.* at 64665.

[102] 80 FR 64725–726; see also *id.* at 64726 (noting ''consideration of emission reduction measures at the source-category level'').

[103] CPP RTC Chapter 1A, 170–72.

[104] *New York* v. *FERC,* 535 US 1, 24 (2002).

[105] *Fed. Power Comm'n* v. *S. Cal. Edison Co.,* 376 U.S. 205, 215 (1964).

establishing the associated just and reasonable rates and charges.[106] However, ''the law places beyond FERC and leaves to the States alone, the regulation of 'any other sale'—most notably, any retail sale—of electricity.'' [107] Therefore, under the FPA, Congress limited the jurisdiction of FERC ''to those matters which are not subject to regulation by the States,'' including ''over facilities used for the generation of electric energy.'' [108] Indeed, ''the States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost, and other related state concerns.'' [109] ''Such responsibilities include ''authority over the need for additional generating capacity [and] the type of generating facilities to be licensed.'' [110] Thus, the FPA ''not only establishes an affirmative grant of authority to the federal government to regulate wholesale sales and transmission of electricity in interstate commerce, but also draws a line where that exclusive authority ends and the state's exclusive authority to regulate other matters . . . begins.'' [111]

Courts have observed that regulation of other areas may incidentally affect areas within these exclusive domains, but there is no room for direct regulation by States in areas of FERC domain or vice-versa, and such regulation that would achieve indirectly what could not be done directly is also prohibited.[112] Just as ''FERC has no authority to direct or encourage generation'' [113] absent clear authority from Congress, neither does (indeed, *a fortiori* so much the less does) the EPA.[114] The EPA has no more ability to ''do indirectly what it could not do directly'' than FERC would with respect to matters that the FPA left to the states. Historically, any traditional environmental regulation of the power sector may have incidentally affected these domains without indirectly or directly regulating within them. For example, an on-site control, such as a scrubber, may affect rate determinations as it is factored into potentially recovered costs. The CPP, however, included a BSER that was based largely on measures and subjects exclusively left to FERC and the states, rather than inflicting only permissible, incidental effects on those domains.

The CPP identified as part of the BSER generation-shifting measures. Increased renewable generation capacity, building block 3, falls within a state's authority to determine its generation mix and to direct the planning and resource decisions of utilities under its jurisdiction.[115] Additionally, increased utilization of natural gas combined cycle (NGCC) plants, building block 2, falls within that state authority and within FERC's authority to determine just and reasonable rates by requiring a conclusion that the associated costs of increased utilization rates are reasonable, and, further ignores these areas of exclusive regulation by neglecting to consider changes to regional transmission organization (RTO) and ISO dispatch procedures necessary to achieve the increased utilization rates. By including generation-shifting measures within the states' and FERC's purview in the BSER, rather than relying on traditional controls within the EPA's purview, the EPA established a rule predicated largely upon actions in the power sector outside of the scope of the Agency's authority to compel. Some generation shifting may be an incidental effect of implementing a properly established BSER (*e.g.,* due to higher operation costs), but basing the BSER itself on generation shifting improperly encroaches on FERC and state authorities.

Further, the actual effect of the CPP as anticipated by the EPA was that the states would impose standards of performance based on the EPA's BSER, and sources would largely rely on generation-shifting measures to comply with those standards. In its analysis of potential energy impacts associated with the rule, the CPP modeling ''presume[d] policies that lead to generation shifts and growing use of demand-side [energy efficiency] and renewable electricity generation out to 2029.'' [116] In this manner, the CPP could directly shape the generation mix of a complying state. It is clear from the FPA that Congress intended the states to have that authority, not the relevant federal agency, FERC. Given that even FERC would not have such authority, the only reasonable inference is that Congress did not intend to give the EPA that authority via CAA section 111.[117] Federal law ''may not be interpreted to reach into areas of state sovereignty unless the language of the federal law compels the intrusion,'' [118] and, as discussed above, basing BSER on generation shifting is not authorized by Congress here. Such an interpretation is also consistent with the cooperative-federalism framework of the CAA.[119] While the EPA has previously asserted that the CPP only provides emissions guidelines, leaving the states with the flexibility to create their own compliance measures,[120] the guidelines are based on actions outside of the EPA's authority to directly or indirectly compel and the practical effect of

[106] *Hughes* v. *Talen Energy Marketing, LLC,* 136 S.Ct. 1288, 1291–92 (2016) (citing 16 U.S.C. 824(b)(1), 824d(a) and 824e(a)).

[107] *Id.* at 1292 (quoting *FERC* v. *Electric Power Supply Assn.,* 136 S.Ct. 760, 766 (2016) (EPSA) (quoting 824(b)). The States' reserved authority includes control over in-state ''facilities used for the generation of electric energy.'' 824(b)(1); see *Pacific Gas & Elec. Co.* v. *State Energy Resources Conservation and Development Comm'n,* 461 U.S. 190, 205 (1983) (''Need for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States.'').

[108] 16 U.S.C. 824(a), 824(b)(1); see also *id.* 824*o*(i)(2) (''This section does not authorize . . . [FERC] to order the construction of additional generation or transmission capacity''). There are other jurisdictional limitations under the FPA. For example, publicly-owned and many cooperatively owned utilities are subject to only some elements of the FPA. *Id.* 824(f), 824(b)(2). And entities not operating in interstate commerce, *i.e.,* entities in Alaska, Hawaii, and the Electric Reliability Council of Texas portion of Texas, are also subject to only limited FERC jurisdiction.

[109] *Pacific Gas & Elec. Co.* v. *State Energy Resources Conservation and Development Comm'n,* 461 U.S. 190, 205 (1983).

[110] *Id.* at 212.

[111] Dennis, Jeffrey S., et al., Federal/State Jurisdictional Split: Implications for Emerging Electricity Technologies, 3 (December 2016), *available at https://www.energy.gov/sites/prod/files/2017/01/f34/Federal%20State%20Jurisdictional%20Split-Implications%20for%20Emerging%20Electricity%20Technologies.pdf; see also* 16 U.S.C. 824*o*(i)(2) (''This section does not authorize . . . [FERC] to order the construction of additional generation or transmission capacity'').

[112] *Hughes,* 136 S. Ct. at 1297–98. *See also* EPSA, 753 F.3d at 221, 224 (''the Federal Power Act unambiguously restricts FERC from regulating the retail market'' and quoting *Altamont Gas Transmission Co.* v. *FERC,* 92 F.3d 1239, 1248 (D.C. Cir. 1996)) (noting that ''FERC cannot 'do indirectly what it could not do directly' '').

[113] CRS, The Federal Power Act (FPA) and Electricity Markets, 9 (March 10, 2017), *available at https://www.everycrsreport.com/files/20170310_R44783_dd3f5c7c0c852b78f3ea62166ac5ebdbd_1586e12.pdf.*

[114] *See* 80 FR 64745 (explaining that ''the BSER also reflects other CO_2 reduction strategies that *encourage* increases in generation from lower- or zero-carbon EGUs'') (emphasis added); *cf.* 42 U.S.C. 7651(b) (providing that one purpose of Title IV (but not the CAA overall) is to encourage the ''use of renewable and clean alternative technologies'').

[115] *See* S.Cal. Edison Co., 71 FERC 61,269 (June 2, 1995); see also *Pacific Gas & Elec. Co.* v. *State Energy Resources Conservation and Development Comm'n,* 461 U.S. 190, 205, 212 (1983).

[116] 80 FR 64927.

[117] *See Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers,* 531 U.S. 159, 172 (2001) (citing *Edward J. DeBartolo Corp.* v. *Florida Gulf Coast Building & Constr. Trades Council,* 485 U.S. 568, 575 (1988)).

[118] *Am. Bar Ass'n* v. *FTC,* 430 F.3d 457 (D.C. Cir. 2005).

[119] *See, e.g.,* 42 U.S.C. 7401(b)(3) and (4), 7402(a) and (b), and 7416.

[120] 80 FR 64762 (''States will have the flexibility to choose from a range of plan approaches and measures, including numerous measures beyond those considered in setting the CO_2 emission performance rates'').

implementing the guidelines is that many of those actions likely must be taken.

(5) Commenters' Attempt To Recharacterize the BSER in the CPP as Applying to Sources By Pointing to ''Reduced Utilization'' Is Unavailing and Clearly Precluded by the CAA

(a) The CPP Rejected ''Reduced Utilization'' as a ''System'' for Purposes of CAA Section 111.

Some commenters claim reduced utilization can be ''applied to'' a source as an ''operational method'' for reducing emissions. In the CPP, however, the EPA was clear that reduced utilization on its own ''does not fit within our historical and current interpretation of the BSER.'' [121] The EPA explained: ''Specifically, reduced generation by itself is about changing the amount of product produced rather than producing the same product with a process that has fewer emissions,'' [122] and the EPA has historically based pollution control on ''methods that allow the same amount of production but with a lower-emitting process.'' [123] In proposing to repeal the CPP, the EPA noted that, ''[w]hereas some emission reduction measures (such as a scrubber) may have an incidental impact on a source's production levels, reduced utilization is directly correlated with a source's output.'' [124] Accordingly, ''predicating a section 111 standard on a source's non-performance would inappropriately inject the Agency into an owner/operator's production decisions.'' [125] The EPA is finalizing our proposal that reduced utilization cannot be considered a ''best system of emission reduction'' under CAA section 111(a)(1) because, as the EPA said in the CPP, the EPA has never identified reduced utilization as the BSER and the EPA interprets CAA section 111 to authorize emission limits based on controls that reduce emissions without restricting production. In addition, because the CPP was not premised on ''reduced utilization''—indeed, the EPA expressly renounced that as a basis for the CPP—commenters' attempt to justify the CPP on that basis is unavailing.

(b) Standards of Performance Cannot Be Based on Reduced Utilization

Even if the CPP could be reframed as employing reduced utilization, it would fail to satisfy statutory criteria.

CAA section 302(*l*) provides that a ''standard of performance'' means ''a requirement of continuous emission reduction, including any requirement relating to the operation or maintenance of a source to assure continuous reduction.'' Previously, the Agency has argued that the definitions in CAA section 111(a)(1) ''are more specific'' and therefore controlling,[126] but, to the extent that section 302(*l*) applies, that definition is met when a standard ''applies continuously in that the source is under a continuous obligation to meet its emission rate . . . .'' [127]

Here, the Agency concludes that CAA section 302(*l*) is relevant to interpreting CAA section 111.[128] Statutes should be construed ''so as to avoid rendering superfluous'' any statutory language: ''a statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant. . . .'' [129] Under the CAA, only section 111 requires the establishment of ''standards of performance.'' Thus, ignoring the generally applicable definition in CAA section 302(*l*) in interpreting CAA section 111 would read it out of the statute. Nor is this a situation where Congress provided that the provision-specific definition in CAA section 111 was to supplant the general definition in CAA section 302(*l*). First, the opening phrase of CAA section 302 indicates that the section 302 definitions apply ''[w]hen used in this chapter.'' By contrast, the definitions provisions in some statutes begins with text that expressly provides that the general statutory definitions are supplanted by provision-specific definitions. *See, e.g.,* Clean Water Act (CWA) section 502 (33 U.S.C. 1362) (which begins ''Except as otherwise specifically provided . . . .''). Second, one of the CAA section 302 definitions expressly states that it is supplanted by provision-specific definitions.[130]

However, the Agency was wrong to conclude that ''a requirement of continuous emission reduction'' means only that a standard of performance need apply ''on a continuous basis.'' In fact, Congress used such phrasing in the preceding definition under CAA section 302(k). The terms ''emission limitation'' and ''emission standard'' mean ''a requirement . . . which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis,* including any requirement relating to the operation or maintenance of a source *to assure continuous emission reduction. . . .*'' [131] Whereas emission limitations and emission standards apply ''on a continuous basis, *including any* requirement . . . to assure continuous emission reduction,'' standards of performance *must* impose a ''requirement of continuous emission reduction.''

When Congress made explicit the requirement for ''continuous emission reduction,'' it was to ''affirm the decisions of four U.S. courts of appeals cases that the [A]ct requires continuous emission reductions to be applied.'' [132] Thus, as scholar David Currie observed,

[121] 80 FR 64780.

[122] *Id.*

[123] 80 FR 64782 n.602.

[124] 83 FR 44752.

[125] *Id.*

[126] *See* Brief of Respondent at 129–30, *New Jersey* v. *EPA,* No. 05–1097 (consolidated) (D.C. Cir. May 4, 2007).

[127] 80 FR 64841. *See also* 70 FR 28617 (''Even if the 302(*l*) definition applied to the term 'standard of performance' as used in section 111(d)(1), [the] EPA believes that a cap-and-trade program meets the definition. . . . That is, there is never a time when sources may emit without needing allowances to cover those emissions.'').

[128] Indeed, the provisions of CAA section 302 are supplanted by provision-specific definitions only to the extent that those specific provisions ''expressly'' do so. *See, e.g., Alabama Power* v. *Costle,* 636 F.2d 323, 370 (D.C. Cir. 1979) (holding that CAA section 169(1) is controlled by the general definition in CAA section 302(j) with respect to the ''rule requirement'' in CAA section 302(j) that is not expressly supplanted by CAA section 169(1)).

[129] *Hibbs* v. *Winn,* 542 U.S. 88, 101 (2004). *Cf.* Brief of Respondent at 129, *New Jersey* v. *EPA* (''[s]pecific terms prevail over the general in the same or another statute which might otherwise be controlling.'' (citation and quotation marks omitted)).

[130] *See* CAA section 302(j) (which defines ''major stationary source'' and ''major emitting facility'' and begins ''Except as otherwise expressly provided, ...'').

[131] 42 U.S.C. 7602(k) (emphasis added). *See* H.R. 6161, Rep. No. 95–294, 92 (May 12, 1977) (''Without an enforceable emission limitation *which will be complied with at all times,* there can be no assurance that ambient standards will be attained and maintained. Any emission limitation under the [CAA], therefore must be *met on a constant basis. . . .*'') (emphasis added).

[132] H.R. Conf. Rep. No. 95–564, 514 (Aug. 3, 1977); see also H.R. No. 95–294, 190 (May 12, 1977) (''To make clear the committee's intent that intermittent or supplemental control measures are not appropriate technological systems for new sources (and to prevent the litigation which has been conducted with respect to use of intermittent or supplemental systems at existing sources), the committee adopted language clearly stating that continuous emission reduction technology would be required to meet the requirements of this section.''); and *id.* at 92 (''By defining the terms 'emission limitation,' 'emmission [sic] standard,' and 'standard of performance,' the committee has made clear that constant or continuous means of reducing emissions must be used to meet these requirements.''). For example, ''The Sixth Circuit has agreed with the Fifth, upholding the EPA's rejection of a provision that would have allowed 'intermittent' controls when necessary to meet ambient standards, adding on the basis of a stray remark of the Supreme Court in *Train* that 'emission standards' were only those limiting the 'composition' of an emission, not restrictions on operation or on the content of fuels.'' David P. Currie, Federal Air-Quality Standards and Their Implementation, 365 American Bar Foundation Research Journal, 376 n.58 (1976).

Congress ''intended to forbid reliance on intermittent control strategies, such as temporary use of low-sulfur fuels *or reductions in plant output* . . . .'' [133] Because standards of performance cannot be based on intermittent control strategies, basing BSER on reduced utilization is statutorily precluded for purposes of CAA section 111.

Finally, basing the BSER on reduced utilization contravenes the plain meaning of a ''standard of performance.'' As the Supreme Court held most recently in *Weyerhaeuser* v. *FWS,* 139 S. Ct. 361 (2018),[134] and previously in *Solid Waste Agency of Northern Cook County,* courts must give statutory terms meaning, even where they are part of a larger statutorily defined phrase.[135] In the phrase ''standard of performance,'' the term ''performance'' is defined as ''[t]he accomplishment, execution, carrying out, . . . [or] doing of any action or work,'' [136] and thus refers to the source's manufacturing or production of product. Reduced utilization does not involve improvements to a source's emissions during ''performance;'' instead it calls for non-performance—the cessation or limitation of manufacturing or production —of a source. Accordingly, reduced utilization cannot form the basis of a ''standard of performance'' under CAA section 111.

The definition of ''standard of performance,'' and the scope of the ''best system of emission reduction'' contained within, confers considerable discretion on the EPA to interpret the statute and make reasonable policy choices pursuant to *Chevron* step two as to what is the best system to reduce emissions of a particular pollutant from a particular type of source. However, by making clear that the ''application'' of the BSER must be to the source, Congress spoke directly in *Chevron* step one terms to the question of whether the BSER may contain measures other than those that can be put into operation at a particular source: It may not. The approach to BSER in the CPP is thus unlawful and the CPP must be repealed.

C. Independence of the Repeal of the Clean Power Plan

Although this action appears in the same document as the ACE rule and the revisions to the emission guidelines implementing regulations, the repeal of the CPP is a distinct final agency action that is not contingent upon the promulgation of ACE or the new implementing regulations. As explained above, Congress spoke directly to the question of whether CAA section 111 authorizes the EPA to issue regulations pursuant to CAA section 111(d) that call for the establishment of standards of performance based on the types of measures that comprised the second and third building blocks of the CPP's BSER permits the Agency's to consider generation-shifting as a potential system of emission reduction in developing emission guidelines. The answer to that question is no.

The CPP described itself as a ''significant step forward in reducing [GHG] emissions in the U.S.'' and relied ''in large part on already clearly emerging growth in clean energy innovation, development and deployment . . . .'' 80 FR 64663. Market-based forces have already led to significant generation shifting in the power sector. However, the fact that those market forces have had that result does not confer authority on the EPA beyond what Congress conferred in the CAA.

The EPA does not deny that, if it were validly within the Agency's authority under the statute, regulations that can only be complied with through widespread implementation of generation shifting might be a workable policy for achieving sector-wide carbon-intensity reduction goals. But what is not legal cannot be workable. The CPP's reliance on generation shifting as the basis of the BSER is simply not within the grant of statutory authority to the Agency. The text of CAA section 111 is clear, leaving no interpretive room on which the EPA could seek deference for the CPP's grid-wide management approach. Accordingly, EPA is obliged to repeal the CPP to avoid acting unlawfully.

Because the EPA exceeded its statutory authority when it promulgated the CPP, the EPA's repeal of that rule will remain valid even if a future reviewing court were to find fault with the separate and distinct legal interpretations and record-based findings underpinning the ACE rule (see Section III) or the new implementing regulations (see Section IV). The EPA today repeals the CPP as a separate action, distinct from its promulgation of the ACE rule and of revisions to its regulations implementing section 111(d). The EPA would repeal the CPP today even if it were not yet prepared to promulgate these other regulations, or indeed if it knew that those other regulations would not survive judicial review.

III. The Affordable Clean Energy Rule

A. The Affordable Clean Energy Rule Background

1. Regulatory Background

In December 2017, the EPA published an Advanced Notice of Proposed Rule Making (ANPRM) to solicit comment on what the Agency should include in CAA section 111(d) emission guidelines, including soliciting comment on the respective roles of the states and the EPA; what systems of emission reduction might be available and appropriate for reducing GHG emissions from existing coal-fired EGUs; and potential flexibilities that could be afforded under the NSR program to improve the implementation of a future rule.[137] The EPA received more than 270,000 comments on the ANPRM.

Informed by the ANPRM, the EPA then published the ACE proposal, which consisted of three distinct actions: (1) Emission guidelines for GHG emissions from existing coal-fired EGUs, based on application of HRI measures as the BSER; (2) new emission guideline implementation regulations; and (3) revisions to the NSR program to facilitate the implementation of efficiency projects at EGUs.[138]

In this final action, the EPA has determined that the BSER for CO_2 emissions from existing coal-fired EGUs is HRI, in the form of a specific set of technologies and operating and maintenance practices that can be applied at and to certain existing coal-fired EGUs, which is consistent with the legal interpretation adopted in the repeal of the CPP (see above section II). Also, in this action, the EPA has provided information for state plan development. The state plan development discussion is consistent with the new implementing regulations for CAA section 111(d) emission guidelines discussed separately in section IV of this preamble.

[133] David P. Currie, Direct Federal Regulation of Stationary Sources Under the Clean Air Act, 128 U. Pa. L. Rev. 1389, 1431 (1980) (emphasis added). Professor Curie also suggests that ''the requirement of continuous controls . . . may even have been implicit in the original section 111.'' *Id.*

[134] 139 S.Ct. at 368–69 (rejecting environmental group's contention that statutory definition of ''critical habitat'' is complete and does not require independent inquiry into meaning of the term ''habitat,'' which the statute left undefined).

[135] 531 U.S. at 172 (requiring that the word ''navigable'' in the Clean Water Act's statutorily defined term ''navigable waters'' be given ''effect'').

[136] The Oxford English Dictionary (2d ed. 1989) (1. The carrying out of a command, duty, purpose, promise, etc.; execution, discharge, fulfilment. 2. a. The accomplishment, execution, carrying out, working out of anything ordered or undertaken; the doing of any action or work; working, action (personal or mechanical'') and American Heritage Dictionary of the English Language (2d ed. 1969) (''1. The act of performing, or the state of being performed.'' [perform 1. To begin and carry through to completion]).

[137] *See* 82 FR 61507 (December 28, 2017).

[138] *See* 83 FR 44746 (August 31, 2018).

As noted above, the EPA also proposed revisions to the NSR program in parallel with the ACE rule and the new implementing regulations. The EPA is not finalizing NSR revisions at this time; instead, the EPA intends to take final action on the proposed revisions at a later date in a separate notification of final action.

2. Public Comment and Hearing on the ACE Proposal

The Administrator signed the ACE proposal on August 21, 2018, and, on the same day, the EPA made this version available to the public at *https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule.* The 60-day public comment period on the proposal began on August 31, 2018, the day of publication in the **Federal Register**. The EPA held a public hearing on October 1, 2018, in Chicago, Illinois, and extended the public comment period until October 31, 2018, to allow for 30 days of public comment following the public hearing. The EPA received nearly 500,000 comments on the ACE proposal.

B. Legal Authority To Regulate EGUs

In the CPP, the EPA stated that the Agency's then-concurrent promulgation of standards of performance under CAA section 111(b) regulating CO_2 emissions from new, modified, and reconstructed EGUs triggered the need to regulate existing sources under CAA section 111(d).[139] In ACE, the EPA is not re-opening any issues related to this conclusion, but for the convenience of stakeholders and the public, the EPA summarizes the explanation provided in the CPP here.

CAA section 111(d)(1) requires the Agency to promulgate regulations under which the states must submit state plans regulating ''any existing source'' of certain pollutants ''to which a standard of performance would apply if such existing source were a new source.'' Under CAA section 111(a)(2) and 40 CFR 60.15(a), a ''new source'' is defined as any stationary source, the construction, modification, or reconstruction of which is commenced after the publication of proposed regulations prescribing a standard of performance under CAA section 111(b) applicable to such source. In the CPP, the EPA noted that, at that time, the Agency was concurrently finalizing a rulemaking under CAA section 111(b) for CO_2 emissions from new sources, which provided the requisite predicate for applicability of CAA section 111(d).[140]

The EPA explained in the CAA section 111(b) rule (80 FR 64529) that ''section 111(b)(1)(A) requires the Administrator to establish a list of source categories to be regulated under section 111. A category of sources is to be included on the list 'if in [the Administrator's] judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health and welfare.' '' Then, for the source categories listed under CAA section 111(b)(1)(A), the Administrator promulgates, under CAA section 111(b)(1)(B), ''standards of performance for new sources within such category.'' The EPA further took the position that, because EGUs had previously been listed, it was unnecessary to make an additional finding as a prerequisite for regulating CO_2. The Agency expressed the view that, under CAA section 111(b)(1)(A), findings are category-specific and not pollutant-specific, so a new finding is not needed with regard to a new pollutant. The Agency further asserted that, even if it were required to make a pollutant-specific finding, given the large amount of CO_2 emitted from this source category (the largest single stationary source category of emissions of CO_2 by far) that EGUs would easily meet the standard for making such a listing. The Agency further took the position that, given the large amount of emissions from the source category, it was not necessary in that rule ''for the EPA to decide whether it must identify a specific threshold for the amount of emissions from a source category that constitutes a significant contribution.'' [141]

That CAA section 111(b) rulemaking remains in effect, although the EPA has proposed to revise it.[142] That rule continues to provide the requisite predicate for applicability of CAA section 111(d).

C. Designated Facilities for the Affordable Clean Energy Rule

The EPA is finalizing that a designated facility [143] subject to this regulation is any coal-fired electric utility steam generating unit that: (1) Is not an integrated gasification combined cycle (IGCC) unit (*i.e.,* utility boilers, but not IGCC units); (2) was in operation or had commenced construction on or before January 8, 2014; [144] (3) serves a generator capable of selling greater than 25 megawatts (MW) to a utility power distribution system; and (4) has a base load rating greater than 260 gigajoules per hour (GJ/h) (250 million British thermal units per hour (MMBtu/h)) heat input of coal fuel (either alone or in combination with any other fuel). Consistent with the new implementing regulations, the term ''designated facility'' is used throughout this preamble to refer to the sources affected by these emission guidelines.[145] For this action, consistent with prior CAA section 111 rulemakings concerning EGUs, the term ''designated facility'' refers to a single EGU that is affected by these emission guidelines.

The EPA's applicability criteria for ACE differ from those in the CPP because the EPA's determination of the BSER is only for coal-fired electric utility steam generating units. In the ACE proposal, the EPA did not identify a BSER for IGCC units, oil- or natural gas-fired utility boilers, or fossil fuel-fired stationary combustion turbines and, thus, such units are not designated facilities for purposes of this action. In the ACE proposal (and previously in the ANPRM), the EPA solicited information on the cost and performance of technologies that may be considered as the BSER for fossil fuel-fired stationary combustion turbines and other fossil-fuel fired EGUs. The EPA currently does not have adequate information to determine a BSER for these EGUs and, if appropriate, the EPA will address GHG emissions from these EGUs in a future rulemaking.

A coal-fired EGU for purposes of this rulemaking (and consistent with the definition of such units in the Mercury and Air Toxics Standards (MATS) (77 FR 9304)) is an electric utility steam generating unit that burns coal for more than 10.0 percent of the average annual heat input during the three previous calendar years. Further, for purposes of this rulemaking, the following EGUs will be excluded from a state's plan: (1) Those units subject to 40 CFR part 60, subpart TTTT as a result of commencing

[139] *See* 80 FR 64715.

[140] *Id.*

[141] *See* 80 FR 64531.

[142] *See* 83 FR 65424.

[143] The term ''designated facility'' means ''any existing facility which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the existing facility were an affected facility.'' *See* 40 CFR 60.21a(b).

[144] Under CAA section 111, the determination of whether a source is a new source or an existing source (and thus potentially a designated facility) is based on the date that the EPA proposes to establish standards of performance for new sources. January 8, 2014, is the date the proposed GHG standards of performance for new fossil fuel-fired EGUs were published in the **Federal Register** (79 FR 1430).

[145] The EPA recognizes, however, that the word ''facility'' is often understood colloquially to refer to a single power plant, which may have one or more EGUs co-located within the plant's boundaries.

a qualifying modification or reconstruction; (2) steam generating units subject to a federally enforceable permit limiting net-electric sales to one-third or less of their potential electric output or 219,000 megawatt-hour (MWh) or less on an annual basis; (3) a stationary combustion turbine that meets the definition of a simple cycle stationary combustion turbine, a combined cycle stationary combustion turbine, or a combined heat and power combustion turbine; (4) an IGCC unit; (5) non-fossil-fuel units (*i.e.,* units capable of combusting at least 50 percent non-fossil fuel) that have historically limited the use of fossil fuels to 10 percent or less of the annual capacity factor or are subject to a federally enforceable permit limiting fossil fuel use to 10 percent or less of the annual capacity factor; (6) units that serve a generator along with other steam generating unit(s) where the effective generation capacity (determined based on a prorated output of the base load rating of each steam generating unit) is 25 MW or less; (7) a municipal waste combustor unit subject to 40 CFR part 60, subpart Eb; (8) commercial or industrial solid waste incineration units that are subject to 40 CFR part 60, subpart CCCC; or (9) a steam generating unit that fires more than 50-percent non-fossil fuels.

D. Regulated Pollutant

The air pollutant regulated in this final action is GHGs. However, the standards in this rule are expressed in the form of limits solely on emissions of CO_2, and not the other constituent gases of the air pollutant GHGs.[146] The EPA is not establishing a limit on aggregate GHGs or separate emission limits for other GHGs (such as methane (CH_4) or nitrous oxide (N_2O)) as other GHGs represent significantly less than one percent of total estimated GHG emissions (as CO_2 equivalent) from fossil fuel-fired electric power generating units.[147] Notwithstanding the form of the standard, consistent with other EPA regulations addressing GHGs, the air pollutant regulated in this rule is GHGs.[148]

E. Determination of the Best System of Emission Reduction

1. Guiding Principles in Determining the BSER

CAA section 111(d)(1) directs the EPA to promulgate regulations establishing a procedure similar to that under CAA section 110,[149] under which states submit state plans that establish ''standards of performance'' for emissions of certain air pollutants from existing sources which, if they were new sources, would be subject to new source standards under CAA section 111(b), and that provide for the implementation and enforcement of those standards of performance. Because CAA section 111(a)(1) defines ''standard of performance'' for purposes of all of section 111, and because federal standards for new sources established under section 111(b) and standards for existing sources established by a state plan under section 111(d) are both ''standards of performance,'' it is the EPA's responsibility to determine the BSER for designated facilities for standards developed under both CAA section 111(b) for new sources and section 111(d) for existing sources.[150] In making this determination, the EPA identifies all ''adequately demonstrated'' ''system[s] of emission reduction'' for a particular source category and then evaluates those systems to determine which is the ''best,'' [151] while ''taking into account'' the factors of ''cost . . . non-air quality health and environmental impact and energy requirements.'' [152] Because CAA section 111 does not set forth the weight that should be assigned to each of these factors, courts have granted the Agency a great degree of discretion in balancing them.[153]

The CAA limits ''standards of performance'' to systems that can be applied at and to a stationary source (*i.e.,* as opposed to off-site measures that are implemented by an owner or operator, such as subsidizing lower-emitting sources) and that lead to continuous emission reductions (*i.e.,* are not intermittent control techniques). Such systems include add-on controls and lower-emitting processes/practices/designs that can be applied to a designated facility, *i.e.,* a building, structure, facility, or installation regulated under CAA section 111.[154] As discussed in section II of this preamble, this is the only permissible interpretation of the scope of the EPA's authority under CAA section 111. But this clear outer bound on the EPA's authority leaves the Agency considerable room for interpretation and policy choice within that scope in determining the BSER that has been adequately demonstrated to address a particular source category's emission of a given pollutant. Case law under CAA section 111(b) explains that ''[a]n adequately demonstrated system is one which has been shown to be reasonably reliable, reasonably efficient, and which can reasonably be expected to serve the interests of pollution control without becoming exorbitantly costly in an economic or environmental way.'' [155] While some of these cases suggest that ''[t]he Administrator may make a projection based on existing technology,'' [156] the D.C. Circuit has also

[146] In the 2009 Endangerment Finding for mobile sources, the EPA defined the relevant ''air pollution'' as the atmospheric mix of six long-lived and directly emitted greenhouse gases: Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). *See* 74 FR 66497. Additionally, note that the new CAA section 111(d) implementing regulations at 40 CFR 60.22a(b)(1) do not change the requirement of the previous implementing regulations, 40 CFR 60.22(b)(1) that emission guidelines provide information concerning known or suspected endangerment of public health or welfare caused, or contributed to, by the designated pollutant. For this emission guideline, that information is contained in the 2009 Endangerment Finding.

[147] EPA Greenhouse Gas Reporting Program; *www.epa.gov/ghgreporting/.*

[148] *See, e.g.,* 79 FR 34960.

[149] CAA section 110 governs state implementation plans, or SIPs, which states develop and submit for EPA approval and which are used to ensure attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

[150] *See also* 40 CFR 60.22a. However, while the BSER underlying both new- and existing-source performance standards is determined by the EPA, the performance standards for new sources are directly established by the EPA under section 111(b), whereas states establish performance standards (applying the BSER) for existing sources in their jurisdiction in their state plans under section 111(d), and Congress has expressly required that EPA permit states, in establishing performance standards for existing sources, to take into account the remaining useful life of the source and other source-specific factors. *See* 42 U.S.C. 7411(d)(1).

[151] The D.C. Circuit recognizes that the EPA's evaluation of the ''best'' system must also include ''the amount of air pollution as a relevant factor to be weighed . . . .'' *Sierra Club* v. *Costle,* 657 F.2d 298, 326 (D.C. Cir. 1981). Additionally, a system cannot be ''best'' if it does more harm than good due to cross-media environmental impacts. *See Portland Cement,* 486 F. 2d at 384; *Sierra Club,* 657 F.2d at 331; *see also Essex Chemical Corp.,* 486 F.2d 427, 439 (D.C. Cir. 1973) (remanding standard to consider solid waste disposal implications of the BSER determination). Nevertheless, CAA section 111 does not require the ''greatest degree of emission control'' or ''mandate that the EPA set standards at the maximum degree of pollution control technologically achievable.'' *Sierra Club,* 657 F.2d at 330.

[152] The EPA may consider energy requirements on both a source-specific basis and a sector-wide, region-wide or nationwide basis. Considered on a source-specific basis, ''energy requirements'' entail, for example, the impact, if any, of the system of emission reduction on the source's own energy needs. As discussed in this document, a consideration of ''energy requirements'' informs the EPA's judgment that repowering and refueling coal-fired facilities to be fueled by natural gas is not appropriate for consideration as BSER here.

[153] *Lignite Energy,* 198 F.3d 930, 933 (D.C. Cir. 1999).

[154] *See* section 111(a)(3) for definition of ''stationary source.''

[155] *Essex Chemical Corp.,* 486 F.2d 375, 433–34 (D.C. Cir. 1973).

[156] *Portland Cement Ass'n* v. *Ruckelshaus,* 486 F.2d 375, 391 (D.C. Cir. 1973).

noted that ''there is inherent tension'' between considering a particular control technique as both ''an emerging technology and an adequately demonstrated technology.'' [157] Nevertheless, the EPA appears to ''have authority to hold the industry to a standard of improved design and operational advances, so long as there is substantial evidence that such improvements are feasible.'' [158] The essential question, therefore, is whether the BSER is ''available.'' [159]

In considering the availability of different systems of emission reduction, the ''EPA must examine the effects of technology on the grand scale,'' because CAA section 111 standards are, after all, ''a national standard with long-term effects.'' [160] To that end, the Agency must ''consider the representativeness for the industry as a whole of the tested plants on which it relies. . . .'' [161] A CAA section 111 standard, therefore, ''cannot be based on a 'crystal ball' inquiry.'' [162]

Whereas the EPA establishes performance standards for new sources under CAA section 111(b), section 111(d) provides *that states* are primarily responsible for regulating existing sources. This bifurcated approach dovetails with testimony offered during development of the CAA Amendments of 1970 (which established the section 111 program)—specifically, Secretary Finch explained that ''existing stationary sources of air pollution are so numerous and diverse that the problems they pose can most efficiently be attacked by state and local agencies.'' [163] Indeed, Congress eventually made explicit the requirement that the EPA allow states to take into account the ''remaining useful life'' of an existing source, ''among other factors,'' when applying a standard of performance to any particular source.[164] Accordingly, the Agency's identification of the BSER is based on what is ''adequately demonstrated'' and broadly achievable for a source category across the country, while each state—which will be more familiar with the operational and design characteristics of actually existing sources within their borders—is responsible for developing source-specific standards reflecting application of the BSER.[165] Indeed, Congress has expressly provided that the EPA must permit states to take into consideration a source's remaining useful life, among other factors, when applying a standard of performance to a particular source.[166]

In the ACE proposal, the EPA provided a discussion of the identified systems of emission reduction and explained why certain systems were eliminated from consideration at a preliminary state or were otherwise determined not to be the ''best system.'' The EPA received public comments that challenged or refuted the Agency's evaluation of these systems of emission reduction. A discussion of those reduction measures and a summary of significant public comments are provided below.

The EPA proposed that ''heat rate improvement'' (HRI, which may also be referred to as ''efficiency improvement'') is the BSER for existing coal-fired EGUs. In this action, after consideration of public comments, the EPA is finalizing its proposed determination that HRI is the BSER. The basis for the final determination and a summary of significant public comments received on the proposed determination are discussed below.

2. Heat Rate Improvement Is the BSER for Existing Coal-Fired EGUs

a. Background and BSER Determination

Heat rate is a measure of efficiency that is commonly used in the power sector. The heat rate is the amount of energy or fuel heat input (typically measured in British thermal units, Btu) required to generate a unit of electricity (typically measured in kilowatt-hours, kWh). The lower an EGU's heat rate, the more efficiently it converts heat input to electrical output. As a result, an EGU with a lower heat rate consumes less fuel per kWh of electricity generated and, as a result, emits lower amounts of CO_2—and other air pollutants—per kWh generated (as compared to a less efficient unit with a higher heat rate). Heat rate data from existing coal-fired EGUs indicate that there is potential for improvement across the source category.

Heat rate improvement measures can be applied—and some measures have already been applied—to all existing EGUs (supporting the Agency's determination that HRI measures are the BSER). However, the U.S. fleet of existing coal-fired EGUs is a diverse group of units with unique individual characteristics that are spread across the country.[167] As a result, heat rates of existing coal-fired EGUs in the U.S. vary substantially. Thus, even though the variation in heat rates among EGUs with similar design characteristics, as well as year-to-year variation in heat rate at individual EGUs, indicate that there is potential for HRI that can improve CO_2 emission performance across the existing coal-fired EGU fleet, this potential may vary considerably at the unit level—including because particular units may not be able to employ certain HRI measures, or may have already done so. Accordingly, the EPA identified several available technologies and equipment upgrades, as well as best operating and maintenance practices, that EGU owners or operators may apply to improve an individual EGU's heat rate. The EPA referred to these HRI technologies and techniques as ''candidate technologies'' and solicited comment on their technical feasibility, applicability, performance, and cost.

The EPA received numerous public comments, both supporting and opposing, the proposed determination that HRI is the BSER. Many commenters supported the proposed concept of a unit-specific, state-led evaluation of HRI potential as a means of establishing a unit-specific standard of performance. The commenters argued that it is not possible to adopt uniform, nationally applicable standards of performance based on implementation of particular HRI technologies because each individual unit is subject to a unique combination of factors that can affect the unit's heat rate and HRI potential, many of which are geographically driven and outside the control of a

[157] *Sierra Club* v. *Costle,* 657 F.2d 298, 341 n.157 (D.C. Cir.1981); see also *NRDC* v. *Thomas,* 805 F.2d 410, n.30 (D.C. Cir. 1986) (suggesting that ''a standard cannot both require adequately demonstrated technology and also be technology-forcing'').

[158] *Sierra Club,* 657 F.2d at 364. It is not clear whether these cases would have applied the same technology-forcing philosophy to the regulation of existing sources, as at least one case noted that section 111 ''looks toward what may fairly be projected for the regulated future, rather than the state of the art at present, since it is addressed to standards for *new* plants—old stationary source pollution being controlled through other regulatory authority.'' *Portland Cement,* 486 F.2d at 391 (emphasis added).

[159] *See Portland Cement* v. *Ruckelshaus,* 486 F.2d at 391.

[160] *Id.* at 330.

[161] *Nat'l Lime Ass'n* v. *EPA,* 627 F.2d 416, 432–33 (D.C. Cir. 1980).

[162] *Essex Chemical Corp.,* 486 F.2d at 391.

[163] Testimony of Robert Finch, Secretary of Health, Education, and Welfare (which regulated air pollution prior to the establishment of the EPA) in support of S. 3466/H.R. 15848, before the House Subcommittee on Public Health and Welfare, H. Hearing (May 16, 1970), 1970 CAA Legis. Hist. at 1369.

[164] 42 U.S.C. 7411(d)(1).

[165] This approach is analogous to the NAAQS program: Where ''[e]ven with air quality standards being set nationally . . . the steps needed to deal with existing stationary sources would necessarily vary from one State to another and, within States, from one area to another . . . .'' *Id.*

[166] 42 U.S.C. 7411(d)(1).

[167] For example, the current fleet of existing fossil fuel-fired EGUs is quite diverse in terms of size, age, fuel type, operation (*e.g.,* baseload, cycling), boiler type, *etc.* Moreover, geography and elevation, unit size, coal type, pollution controls, cooling system, firing method, and utilization rate are just a few of the parameters that can impact the overall efficiency and performance of individual units.

source. The EPA agrees with these commenters. As previously mentioned, the U.S. fleet of existing coal-fired EGUs is diverse in terms of size, vintage, fuel usage, design, geographic location, *etc.* The HRI potential for each unit will be influenced by source-specific factors such as the EGU's past and projected utilization rate, maintenance history, and remaining useful life (among other factors). Therefore, standards of performance must be established from a unit-level evaluation of the application of the BSER and consideration of other factors at the unit level. States are in the best position to make those evaluations and to consider of other unit-specific factors, and indeed CAA section 111(d)(1) directs EPA to permit states to take such factors into consideration as they develop plans to establish performance standards for existing sources within their jurisdiction.

Other commenters opposed the proposed use of unit-specific HRI plans because the commenters believe that this interpretation is inconsistent with the legislative history and that this approach does not enable significant emissions reductions. Some commenters said that defining BSER in terms of operational efficiency (heat rate) is not consistent with the understanding reflected in the EPA's historic practice in all previous CAA section 111(d) rules, where the BSER was determined based on a specific emission reduction technology. The EPA disagrees with the contention. The EPA proposed that HRI through the application of a specific set of emission reduction technologies (discussed in more detail below) and operational practices is the BSER. That approach is consistent with the direction given in the statute. It is also an approach that recognizes the challenges of applying a single specific emission reduction technology within such a diverse population of designated facilities.

After consideration of public comment, the EPA affirms its determination that, as proposed, HRI is the BSER for existing coal-fired EGUs.

b. The List of Candidate Technologies

While a large number of HRI measures have been identified in a variety of studies conducted by government agencies and outside groups,[168] some of those identified technologies have limited applicability and many provide only negligible HRI. The EPA stated in the proposal that it believed that requiring a state in developing its plan to evaluate the applicability to each of its sources of the entire list of potential HRI options—including those with limited applicability and with negligible benefits—would be overly burdensome to the states. Therefore, the EPA identified and proposed a list of the ''most impactful'' HRI technologies, equipment upgrades, and best operating and maintenance practices that form the list of ''candidate technologies'' constituting the BSER. The candidate technologies of the BSER are listed in Table 1 below. Those technologies, equipment upgrades, and best operating and maintenance practices were deemed to be ''most impactful'' because they can be applied broadly and are expected to provide significant HRI without limitations due to geography, fuel type, *etc.* The EPA solicited comment on each of the proposed candidate technologies and on whether any additional technologies should be added to the list, and on whether there is additional information that the EPA should be aware of and consider in determining the BSER and establishing the candidate technologies for HRI measures.

The EPA received numerous public comments on the list of candidate technologies. Some commenters stated that there are additional available HRI technologies that should be added to the list of candidate technologies, while many other commenters agreed that the proposed list of ''candidate technologies'' is reasonable and should be considered the core group for states to evaluate in establishing standards of performance. Commenters agreed that the proposed list of ''candidate technologies'' focuses the states' standard-setting process on those HRI measures with the greatest ability to impact CO_2 emissions. Commenters further stated that the EPA's proposed candidate technology list will limit the burden on states by eliminating the need to consider measures that would almost certainly be rejected due to negligible emission reduction benefits, disproportionate costs, or availability. However, commenters also noted that there may be additional HRI opportunities available to a significant number of designated facilities and that states should not be required to limit their evaluations to just the ''candidate technologies'' in establishing unit-specific standards of performance. Some commenters suggested that the EPA establish a process whereby HRI solutions can be added to the list of ''candidate technologies.''

Commenters also stated that some of the equipment upgrades and operating practices proposed as candidate technologies have the potential to improve an EGU's *net* heat rate by reducing auxiliary load but would have no impact on the unit's *gross* heat rate.[169] Comments regarding gross versus net heat rate, and gross- versus net-based standards of performance, are discussed in more detail below in section III.F.1.c of this preamble.

The EPA considered the public comments on the BSER technologies and believes that the proposed list still represents the most broadly applicable and impactful collection of HRI measures. Therefore, the EPA is, in this action, finalizing the proposed technologies, equipment upgrades, and best operating and maintenance practices provided in Table 1 of the proposal [170] as the final list of ''candidate technologies'' whose applicability to each designated facility within their boundaries states must evaluate in establishing a standard of performance for that source in their state plans under CAA section 111(d).

The technologies and operating and maintenance practices listed and described below are generally available and appropriate for all types of EGUs. However, some existing EGUs will have already implemented some of the listed HRI technologies, equipment upgrades, and operating and maintenances practices. There will also be unit-specific physical or cost considerations that will limit or prevent full implementation of the listed HRI technologies and equipment upgrades. States will consider these and other factors when establishing unit-level standards of performance. The final list of ''candidate technologies''—with the range of expected percent HRI—is provided below in Table 1.

[168] *See* Table 3 in ANPRM, 82 FR 61515.

[169] The *gross heat rate* is the fuel heat input required to generate a unit of electricity (typically presented in Btu/kWh-gross). The *net heat rate* is the fuel heat input required to generate a unit of electricity minus the electricity that is used to power facility auxiliary equipment (typically presented in Btu/kWh-net).

[170] *See* 83 FR 44757.

TABLE 1—SUMMARY OF MOST IMPACTFUL HRI MEASURES AND RANGE OF THEIR HRI POTENTIAL (%) BY EGU SIZE

HRI Measure	<200 MW		200–500 MW		>500 MW	
	Min	Max	Min	Max	Min	Max
Neural Network/Intelligent Sootblowers	0.5	1.4	0.3	1.0	0.3	0.9
Boiler Feed Pumps	0.2	0.5	0.2	0.5	0.2	0.5
Air Heater & Duct Leakage Control	0.1	0.4	0.1	0.4	0.1	0.4
Variable Frequency Drives	0.2	0.9	0.2	1.0	0.2	1.0
Blade Path Upgrade (Steam Turbine)	0.9	2.7	1.0	2.9	1.0	2.9
Redesign/Replace Economizer	0.5	0.9	0.5	1.0	0.5	1.0
Improved Operating and Maintenance (O&M) Practices	Can range from 0 to >2.0% depending on the unit's historical O&M practices.					

Two of the technologies shown in Table 1—''Blade Path Upgrade (Steam Turbine)'' and ''Redesign/Replace Economizer''—are candidate technologies that are expected to offer some of the largest improvements in unit-level heat rate. However, based on public comments from the ANPRM and the ACE proposal, those also are HRI technologies that have the most potential to trigger NSR requirements. Industrial stakeholders and commenters have indicated, if such HRI trigger NSR, the resulting requirements for analysis, permitting, and capital investments will greatly increase the cost of implementing those HRI technologies and, in the absence of NSR reforms, states will be more likely to determine that those technologies are not cost-effective when analyzing ''other factors'' in determining a standard of performance for an individual facility.

For the ACE proposal, the EPA reflected this in assumptions made in the power sector modeling, using the Integrated Planning Model (IPM), to assess potential costs and benefits of the proposed rule. In that modeling, the EPA assumed two different levels of potential HRI (in percentage terms)—a lower expected HRI without NSR reform and a higher expected HRI with NSR reform.[171]

As mentioned earlier in this preamble, the EPA is not taking final action on the proposed NSR reforms in this final rulemaking action; the EPA intends to take final action on that proposal in a separate final action at a later date. Without finalization of NSR reforms, the EPA anticipates that states in some instances may determine, when considering other factors, that the candidate technologies, ''Blade Path Upgrade (Steam Turbine)'' and ''Redesign/Replace Economizer,'' are less appropriate for application to a particular source or sources than the EPA anticipated would be when it proposed the ACE Rule. Nevertheless, the EPA is retaining these two candidate technologies as part of the final BSER, because it still expects these technologies to be generally applicable across the fleet of existing EGUs, and because the costs of the technologies themselves are generally economical and reasonable.

c. Level of Stringency Associated With the BSER

As discussed in section III.B above, the EPA has the authority and responsibility to determine the BSER. CAA section 111(d)(1), meanwhile, clearly assigns states the role of developing a plan that establishes standards of performance for designated facilities (with EPA's authority to promulgate a federal plan serving as a backstop in the event that a state fails to develop a satisfactory plan [172]). Based on these statutory divisions of roles and responsibilities, the EPA proposed to determine the BSER as HRI achievable through implementation of certain technologies, equipment upgrades, and improved O&M practices. The EPA also declined to propose a standard of performance that presumptively reflects application of the BSER because the establishment of standards of performance for existing sources is the states' role.[173] While declining to provide a presumptive standard, the EPA also proposed to provide *information* on the degree of emission limitation achievable through application of the BSER by providing a range of reductions and costs associated with each of the candidate technologies identified as part of the BSER.[174]

The EPA received numerous comments from states and industry requesting that the EPA provide a presumptive standard, or at minimum, additional guidance and clarity on how states could derive a standard of performance that meets the requirements of this regulation. Additionally, several commenters contended that under CAA section 111(a)(1), the EPA is legally obligated to identify ''the degree of emission limitation achievable through the application of the [BSER]'' (*i.e.,* a level of stringency) because such degree of emission limitation is inextricably linked with the determination of the BSER, which is the EPA's statutory role and responsibility. Upon consideration of these comments, especially the widespread request for more guidance from the EPA on developing appropriate standards of performance, the EPA agrees that it has a responsibility under the CAA to identify the degree of emission reduction that it determines to be achievable through the application of the BSER.

While the CAA provides that the responsibility to establish standards of performance is a state's responsibility, the EPA is identifying the degree of emission limitation achievable through the application of the BSER (*i.e.,* the level of stringency) associated with the candidate technologies. By providing the level of emissions reductions achievable using the candidate technologies the EPA is fulfilling its responsibility as part of the BSER determination. In this instance, the EPA has identified the degree of emission limitation achievable through application of the BSER by providing ranges of expected reductions associated with each of the technologies. These ranges are provided in Table 1, clearly presenting the percentage improvement ranges that can be expected when each candidate technology comprising the BSER is applied to a designated facility. Defining the ranges of HRI as the degree of emission limitation achievable through application of the BSER is consistent with the EPA's position at proposal, where EPA noted that ''while the HRI potential range is provided as guidance for the states, the actual HRI performance for each of the candidate technologies will be unit-specific and

[171] *See* 80 FR 44783.

[172] *See* section 111(d)(2).

[173] *See* 83 FR 44764.

[174] *See* 83 FR 44757, Table 1.

will depend upon a range of unit-specific factors. The states will use the information provided by the EPA as guidance but will be expected to conduct unit-specific evaluations of HRI potential, technical feasibility, and applicability for each of the BSER candidate technologies.'' [175] For purposes of the final ACE rule, states will utilize the ranges of HRI the EPA has provided in developing standards of performance but may ultimately establish standards of performance for one or more existing sources within their jurisdiction that reflect a value of HRI that falls outside of these ranges. See section III.F.1.a of this preamble.

It is reasonable for the EPA to express the ''degree of emission limitation achievable through application of the BSER'' as a set of ranges of values, rather than a single number, that reflects application of the candidate technologies as a whole. This approach is reasonable in light of the nature of what the EPA has identified as the adequately demonstrated BSER (as well as of the structure of section 111 in general and the interplay between section 111(a)(1) and section 111(d) in particular): A suite of candidate technologies that the EPA anticipates will be generally applicable to EGUs at the fleet-wide level but not all of which may be applicable or warranted at the level of a particular facility due to source-specific factors such as the site-specific operational and maintenance history, the design and configuration, the expected operating plans, *etc.* Because of the importance for applicability of the BSER of these source-specific factors, and because the application and installation of the candidate technologies will result in varying degrees of reductions based on application of each of the BSER technologies into the existing infrastructure of the EGU, the EPA has provided ranges of HRI associated with each technology. This accounts for some of the variation that is expected among the designated facilities (*see* section III.F.1.a.(1) of this preamble for discussion of variable emission performance at and between designated facilities). While these ranges represent the degree of emission reduction achievable through application of the BSER, a particular designated facility may have the potential for more or less HRI as a result of the application of the candidate technology based on source-specific characteristics. As further discussed in section III.F. of this preamble, the level of stringency associated with each candidate technology is to be used by states in the process of establishing a standard of performance, and in this process, states may also consider source-specific factors such as variability that may result in a different level of stringency.[176]

d. Detail on the HRI Technologies & Techniques

(1) Neural Network/Intelligent Sootblower

Neural networks. Computer models, known as neural networks, can be used to simulate the performance of the power plant at various operating loads. Typically, the neural network system ties into the plant's distributed control system for data input (process monitoring) and process control. The system uses plant specific modeling and control modules to optimize the unit's operation and minimize the emissions. This model predictive control can be particularly effective at improving the plant's performance and minimizing emissions during periods of rapid load changes—conditions that commenters claimed to be more prevalent now than was the case 5 to 10 years ago. The neural network can be used to optimize combustion conditions, steam temperatures, and air pollution control equipment.

Intelligent Sootblowers. During operations at a coal-fired power plant, particulate matter (PM) (ash or soot) builds up on heat transfer surfaces. This build-up degrades the performance of the heat transfer equipment and negatively affects the efficiency of the plant. Power plant operators use steam injection ''sootblowers'' to clean the heat transfer surfaces by removing the ash build-up. This is often done on a routine basis or as needed based on monitored operating characteristics. Intelligent sootblowers (ISB) are automated systems that use process measurements to monitor the heat transfer performance and strategically allocate steam to specific areas to remove ash buildup.

The cost to implement an ISB system is relatively inexpensive if the necessary hardware is already installed. The ISB software/control system is often incorporated into the neural network software package mentioned above. As such, the HRIs obtained via installation of neural network and ISB systems are not necessarily cumulative.

The efficiency improvements from installation of ISB are often greatest for EGUs firing subbituminous coal and lignite due to more significant and rapid fouling at those units as compared to EGUs firing bituminous coal.

Commenters recommended that the EPA disaggregate its analysis of neural networks and ISB because these technologies do not have to be deployed together and implementing one without the other may be appropriate in many cases. The EPA agrees that the technologies do not have to be implemented together and states must evaluate the applicability and effectiveness of both technologies. The technologies were listed together to emphasize that they are often implemented together and that the resulting HRIs from each are not necessarily additive.

(2) Boiler Feed Pumps

A boiler feed pump (or boiler feedwater pump) is a device used to pump feedwater into a boiler. The water may be either freshly supplied or returning condensate produced from condensing steam produced by the boiler. The boiler feed pumps consume a large fraction of the auxiliary power used internally within a power plant. For example, boiler feed pumps can require power in excess of 10 MW on a 500–MW power plant. Therefore, the maintenance on these pumps should be rigorous to ensure both reliability and high-efficiency operation. Boiler feed pumps wear over time and subsequently operate below the original design efficiency. The most pragmatic remedy is to rebuild a boiler feed pump in an overhaul or upgrade.

Commenters stated that because upgrading an electric boiler feed pump impacts only *net* heat rate (and not *gross* heat rate), it should be excluded from the candidate technologies list. The EPA disagrees that candidate technologies affecting only the *net* heat rate should be removed from the candidate technologies list. These technologies improve the efficiency and reduce emissions from the plant by reducing the auxiliary power load, allowing for more of the produced power to be placed on the grid. As is discussed below in section III.F.1.c., the state will determine whether to establish standards of performance as *gross* output-based standards or as *net* output-based standards. If states establish *gross* output-based standards, it will be up to the states to determine how to account for emission reductions that are attributable to technologies affecting only the *net* output.

[175] *See* 83 FR 44763.

[176] As described later in the preamble in section III.F., the EPA envisions states will develop standards of performance for designated facilities in a two -step process where states first apply the BSER and then consider source-specific factors such as remaining useful life.

(3) Air Heater and Duct Leakage Control

The air pre-heater is a device that recovers heat from the flue gas for use in pre-heating the incoming combustion air (and potentially for other uses such as coal drying). Properly operating air pre-heaters play a significant role in the overall efficiency of a coal-fired EGU. The air pre-heater may be regenerative (rotary) or recuperative (tubular or plate). A major difficulty associated with the use of regenerative air pre-heaters is air in-leakage from the combustion air side to the flue gas side. Air in-leakage affects boiler efficiency due to lost heat recovery and affects the axillary load since any in-leakage requires additional fan capacity. The amount of air leaking past the seals tends to increase as the unit ages. Improvements to seals on regenerative air pre-heaters have enabled the reduction of air in-leakage.

The EPA received comments that claimed the applicability of air pre-heater seals is limited, and that low-leakage seals are not feasible on certain units while other commenters agreed that the HRI estimates for leakage reduction are reasonable, and HRI improvement from 0.25 to 1.0 percent is achievable. The EPA agrees that the HRI estimates for air heater and duct in-leakage are reasonable. The EPA agrees that low-leakage seals are not feasible for certain units (*e.g.,* those using recuperative air heaters). However, the EPA is finalizing a determination that this candidate technology is an element of the BSER because limiting air in-leakage in the air heater and associated duct work can be evaluated on all units and limiting the amount of air in-leakage will improve the efficiency of the unit.

(4) Variable Frequency Drives (VFDs)

VFD on induced draft (ID) fans. The increased pressure required to maintain proper flue gas flow through downstream air pollutant control equipment may require additional fan power, which can be achieved by an ID fan upgrade/replacement or an added booster fan. Generally, older power plant facilities were designed and built with centrifugal fans.

The most precise and energy-efficient method of flue gas flow control is the use of VFD. The VFD controls fan speed electrically by using a static controllable rectifier (thyristor) to control frequency and voltage and, thereby, the fan speed. The VFD enables very precise and accurate speed control with an almost instantaneous response to control signals. The VFD controller enables highly efficient fan performance at almost all percentages of flow turndown.

Due to current electricity market conditions, many units no longer operate at base-load capacity and, therefore, VFDs, also known as variable-speed drives on fans can greatly enhance plant performance at off-peak loads. Additionally, units with oversized fans can benefit from VFD controls. Under these scenarios, VFDs can significantly improve the unit heat rate. VFDs as motor controllers offer many substantial improvements to electric motor power requirements. The drives provide benefits such as soft starts, which reduce initial electrical load, excessive torque, and subsequent equipment wear during startups; provide precise speed control; and enable high-efficiency operation of motors at less than the maximum efficiency point. During load turndown, plant auxiliary power could be reduced by 30–60 percent if all large motors in a plant were efficiently controlled by VFD. With unit loads varying throughout the year, the benefits of using VFDs on large-size equipment, such as FD or ID fans, boiler feedwater and condenser circulation water pumps, can have significant impacts. There are circumstances in which the HRI has been estimated to be much higher than that shown in Table 1, depending on the operation of the unit. Cycling units realize the greatest gains representative of the upper range of HRI, whereas units which were designed with excess fan capacity will exhibit the lower range.

VFD on boiler feed pumps. VFDs can also be used on boiler feed water pumps as mentioned previously. Generally, if a unit with an older steam turbine is rated below 350 MW, the use of motor-driven boiler feedwater pumps as the main drivers may be considered practical from an efficiency standpoint. If a unit cycles frequently then operation of the pumps with VFDs will offer the best results on heat rate reductions, followed by fluid couplings. The use of VFDs for boiler feed pumps is becoming more common in the industry for larger units. And with the advancements in low pressure steam turbines, a motor-driven feed pump can improve the thermal performance of a system up to the 600–MW range, as compared to the performance associated with the use of turbine drive pumps.

Some commenters stated that VFDs should be excluded from the candidate technologies list because the efficiency improvements are likely near zero when the EGU operates as a baseload unit. Commenters further stated that VFD installation may not be reasonable because of their high cost, large physical size, and significant cooling requirements. The EPA agrees that VFD HRIs will be less effective for units that operate consistently at high capacity factors at base load conditions. However, due to the changing nature of the power sector (increased use of natural gas-fired generating sources, more intermittent renewable generating sources, *etc.*), many coal-fired EGUs are cycling more often and the heat rate of such units will benefit from installation of VFD technology. In evaluating the applicability of the BSER technologies, states will consider ''other factors'' that will include expected utilization rate, remaining useful life, physical/space limitations, *etc.* That evaluation of ''other factors'' will identify whether implementation of a BSER candidate technology is reasonable. The EPA is finalizing a determination that this candidate technology is an element of the BSER because it contributes to emission reductions and it is broadly applicable at reasonable cost.

Commenters also stated that VFDs only impact *net* heat rate, so efficiency improvements may not be cost-effective. As stated earlier, if the states choose to establish *gross* output-based standards of performance, it will be up to the states to determine how to account for emission reductions attributable to improvement to *net* heat rate.

(5) Blade Path Upgrade (Steam Turbine)

Upgrades or overhauls of steam turbines offer the greatest opportunity for HRI on many units. Significant increases in performance can be gained from turbine upgrades when plants experience problems such as steam leakages or blade erosion. The typical turbine upgrade depends on the history of the turbine itself and its overall performance. The upgrade can entail myriad improvements, all of which affect the performance and associated costs. The availability of advanced design tools, such as computational fluid dynamics (CFD), coupled with improved materials of construction and machining and fabrication capabilities have significantly enhanced the efficiency of modern turbines. These improvements in new turbines can also be utilized to improve the efficiency of older steam turbines whose efficiency has degraded over time.

Commenters stated that steam turbine blade path upgrades may not be achievable for every turbine because of the potentially significant variability in an individual turbine's parameters when considering costs. Commenters further noted that these are large investments that can require lengthly outages and long lead times.

Other commenters noted that these steam turbine blade path upgrades have been commercially available for over 10 years and that the HRI estimates in Table 1 appear reasonable.

The EPA agrees that steam turbine blade path upgrades are commercially available and that the HRI estimates in Table 1 appear to be consistent with other estimates of HRI achievable from this type of upgrade. As mentioned earlier, based on public comments responding to the ANPRM and the ACE proposal, this HRI measure has the potential to trigger NSR requirements (in the absence of NSR program reforms), and the EPA anticipates that, among the candidate technologies identified as comprising the BSER, states may be relatively more likely to determine in light of the resulting requirements for analysis, permitting, and capital investments that this candidate technology is not economically feasible when evaluating it in the process of establishing standards of performance for particular existing sources within their jurisdiction. Nevertheless, the EPA is finalizing a determination that steam turbine blade bath upgrades are part of the BSER because the EPA anticipates they will still be generally available and feasible at a sufficient scale among the nationwide fleet.

(6) Redesign/Replace Economizer

In steam power plants, economizers are heat exchange devices used to capture waste heat from boiler flue gas which is then used to heat the boiler feedwater. This use of waste heat reduces the need to use extracted energy from the system and, therefore, improves the overall efficiency or heat rate of the unit. As with most other heat transfer devices, the performance of the economizer will degrade with time and use, and power plant representatives contend that economizer replacements are often delayed or avoided due to concerns about triggering NSR requirements. In some cases, economizer replacement projects have been undertaken concurrently with retrofit installation of selective catalytic reduction (SCR) systems because the entrance temperature for the SCR unit must be controlled to a specific range.

Commenters stated that redesigning or replacing an economizer may be limited for some units by the need to maintain appropriate temperatures at a downstream SCR system for nitrous oxides (NOx) control. Commenters also stated that applicability of this measure will be site-specific because boiler layout and construction varies widely between units. Commenters stated that the values in Table 1 appear to reflect a major economizer redesign which may not be possible for many units. The EPA agrees that there will likely be site-specific factors that must be considered to determine whether economizer redesign/replacement is a feasible HRI option (as is the case for all the BSER candidate technologies). Nevertheless, the EPA is finalizing a determination that economizer upgrades (or replacement) are part of the BSER because the EPA anticipates they will still be generally available and feasible at a sufficient scale among the nationwide fleet. As mentioned earlier, states may take into consideration site-specific characteristics (''other factors'') when establishing a standard of performance for each unit.

(7) HRI Techniques—Best Operating and Maintenance Practices

Many unit operators can achieve additional HRI by adopting best O&M practices. The amount of achievable HRI will vary significantly from unit to unit, ranging from no improvement to potentially more than 2.0 percent depending on the unit's historical O&M practices. In setting a standard of performance for a specific unit or subcategory of units, states will evaluate the opportunities for HRI from the following actions.

(a) Adopt HRI Training for O&M Staff

EGU operators can obtain HRI by adopting ''awareness training'' to ensure that all O&M staff are aware of best practices and how those practices affect the unit's heat rate.

Some commenters agreed that HRI training can improve staff awareness of plant efficiency measures, which should result in improved plant performance. Other commenters stated that the benefits of HRI training are highly variable and depend on existing equipment and staff. Some commenters stated that the operating staff already routinely undergo HRI training and that states should not be required to consider these measures in developing their plans. The EPA agrees that the benefits will be variable from unit to unit depending upon the unit's historical O&M practices. If operating staff at a source already undergo routine HRI training, then the state will note that in the standard-setting process. Just as an EGU that has recently installed new or reconstructed boiler feed pumps would not be expected to replace those pumps, a source that already has an effective HRI training program in place would not be expected to implement a new HRI training program. The EPA is finalizing a determination that this practice is an element of the BSER because it can result in emission reductions and can be broadly implemented at reasonable cost.

(b) Perform On-Site Appraisals To Identify Areas for Improved Heat Rate Performance

Some large utilities have internal groups that can perform on-site evaluations of heat rate performance improvement opportunities. Outside (*i.e.,* third-party) groups can also provide site-specific/unit-specific evaluations to identify opportunities for HRI.

Commenters stated that the benefits of on-site appraisals are variable, speculative, and site-specific. Commenters stated that no state should determine what opportunities a coal-fired EGU might find during an on-site appraisal, and, therefore, that states should not be required to evaluate the applicability of on-site appraisals when developing their plans and establishing standards of performance for existing sources within their jurisdiction. The EPA agrees that the benefits of on-site appraisals will be variable and site-specific. As with other BSER measures, it will be up to each state to determine the extent of this requirement. States may require that the owner/operator perform an on-site appraisal to identify areas for HRI or the state may choose to have a third party conduct an on-site HRI appraisal.

(c) Improved Steam Surface Condenser—Cleaning

Effective operation of the steam surface condenser in a power plant can significantly improve a unit's heat rate. In fact, in many cases ineffective operation can pose the most significant hindrance to a plant trying to maintain its original design heat rate. Since the primary function of the condenser is to condense steam flowing from the last stage of the steam turbine to liquid form, it is most desirable from a thermodynamic standpoint that this occurs at the lowest temperature reasonably feasible. By lowering the condensing temperature, the backpressure on the turbine is lowered, which improves turbine performance.

Condenser cleaning. A condenser degrades primarily due to fouling of the tubes and air in-leakage. Tube fouling leads to reduced heat transfer rates, while air in-leakage directly increases the backpressure of the condenser and degrades the quality of the water. Condenser tube cleaning can be performed using either on-line methods or more rigorous off-line methods.

Commenters stated that improved steam surface condenser cleaning is a viable O&M option. Commenters stated that the need for such cleaning can be determined by enhanced monitoring of condenser performance. The EPA agrees with this assessment and notes that many owner/operators may already have steam surface condenser cleaning as part of routine O&M for their units. The EPA is finalizing a determination that this O&M practice is an element of the BSER because it provides opportunity for heat rate improvement and is broadly applicable.

e. Cost of HRI

The EPA finds that the costs of the HRI technologies and practices that the EPA has identified as the BSER and provided in Table 1 are reasonable because they improve the efficiency of the units to which they are applied. This results in lower operating costs (especially lower fuel costs). In fact, these HRI technologies and practices are the types of efficiency improvement measures that some owners and operators have reasonably implemented at times over the course of the operating life of their EGUs. In specific circumstances the cost to implement one or more of the technologies may be determined to be unreasonable—after consideration of source-specific factors. This will be determined when states establish standards by applying the BSER and taking other factors, including remaining useful life, into consideration.

(1) Reasonableness of Cost

As mentioned earlier, under CAA section 111(a)(1), the EPA determines ''the best system of emission reduction which (taking into account the *cost* of achieving such reduction . . .) . . . has been adequately demonstrated.'' 42 U.S.C. 7411(a)(1) (emphasis added). In several cases, the D.C. Circuit has elaborated on this cost factor in various ways, stating that the EPA may not adopt a standard for which costs would be ''exorbitant,'' [177] ''greater than the industry could bear and survive,'' [178] ''excessive,'' [179] or ''unreasonable.'' [180] These formulations appear to be synonymous and suggest a cost-reasonableness standard. Therefore, in this action, the EPA has evaluated whether the costs of HRI are considered to be reasonable as a general matter across the fleet of existing sources.

Any efficiency improvement made by an EGU will also reduce the amount of fuel consumed per unit of electricity output; fuel costs can account for a large percentage of the overall costs of power production. The cost attributable to CO_2 emission reductions, therefore, is the net cost of achieving HRIs after any savings from reduced fuel expenses. So, over some time period (depending upon, among other factors, the extent of HRIs, the cost to implement such improvements, and the unit utilization rate), the savings in fuel cost associated with HRIs may be sufficient to cover the costs of implementing the HRI measures. Thus, the net costs of HRIs associated with reducing CO_2 emissions from designated facilities can be relatively low depending upon each EGU's individual circumstances. It should be noted that this cost evaluation is not an attempt to determine the affordability of the HRI in a business or economic sense (*i.e.,* the reasonableness of the imposed cost is not determined by whether there is an economic payback within a predefined time period). However, the ability of EGUs to recoup some of the costs of HRIs through fuel savings supports a finding that costs are reasonable. While some EGUs may not realize the full potential of cost recuperation from fuel savings, the EPA finds that the net costs of implementing HRIs as an approach to reducing CO_2 emissions from fossil fuel-fired EGUs are reasonable because they are not exorbitant or excessive. In fact, these HRIs are the types of efficiency improvement measures that some owners and operators have reasonably implemented at times over the course of the operating life of their EGUs.

It will be up to the states to, either directly or indirectly, take cost into consideration in establishing unit-specific standards of performance. CAA section 111(d) explicitly allows the states to take into consideration, among other factors, the remaining useful life of the existing source in applying the standard of performance. For example, a state may find that an HRI technology is applicable for an affected coal-fired EGU but find that the costs are not reasonable when consideration is given to the timeframe for the planned retirement of the source (*i.e.,* the source's remaining useful life). A state may find that an HRI technology is applicable for an affected coal-fired EGU but find that the costs are not reasonable because the source is already implementing that HRI technology and it would not be reasonable to expect the source to replace that HRI technology with a newer version of the same technology.

There are several ways that cost can be considered. For example, when evaluating costs for criteria pollutants in a BACT analysis or for a ''beyond-the-floor'' analysis for HAP under CAA section 112, the emphasis is focused on the cost of control relative to the amount of pollutant removed—a metric typically referred to as the ''cost-effectiveness.'' There have been relatively few BACT analyses evaluating GHG reduction technologies for coal-fired EGUs. Therefore, there are not a large number of GHG cost-effectiveness determinations to compare against as a measure of the cost reasonableness. Nevertheless, in PSD and title V permitting guidance for GHG emissions, the EPA noted that ''it is important in BACT reviews for permitting authorities to consider options that improve the overall energy efficiency of the source or modification—through technologies, processes and practices at the emitting unit. In general, a more energy efficient technology burns less fuel than a less energy efficient technology on a per unit of output basis.'' [181] The EPA has also noted that a ''number of energy efficiency technologies are available for application to both existing and new coal-fired EGU projects that can provide incremental step improvements to the overall thermal efficiency.'' [182]

(2) Cost of the HRI Candidate Technologies Measures

The estimated costs for the BSER candidate technologies are presented below in Table 2. These are cost ranges from the 2009 Sargent & Lundy Study [183] updated to $2016.[184] These costs correspond to ranges of HRI (percent) presented earlier in Table 1.

[177] *Lignite Energy,* 198 F.3d at 933.

[178] *Portland Cement,* 513 F.2d at 508.

[179] *Sierra Club,* 657 F.2d at 343.

[180] *Id.*

[181] See page 21, ''PSD and Title V Permitting Guidance for Greenhouse Gases,'' EPA–457/B–11–001, March 2011; *https://www.epa.gov/sites/production/files/2015-12/documents/ghgpermittingguidance.pdf.*

[182] *See* page 25, ''Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Coal-fired Electric Generating Units,'' October 2010; *https://www.epa.gov/sites/production/files/2015-12/documents/electricgeneration.pdf.*

[183] ''Coal-Fired Power Plant Heat Rate Reductions'' Sargent & Lundy report SL–009597 (2009) Available in the rulemaking docket at EPA–HQ–OAR–2017–0355–21171.

[184] The conversion factor comes from Federal Reserve Economic Data (FRED). *See https://fred.stlouisfed.org.*

TABLE 2—SUMMARY OF COST ($2016/kW) OF HRI MEASURES

HRI Measure	<200 MW		200–500 MW		>500 MW	
	Min	Max	Min	Max	Min	Max
Neural Network/Intelligent Sootblowers	4.7	4.7	2.5	2.5	1.4	1.4
Boiler Feed Pumps	1.4	2.0	1.1	1.3	0.9	1.0
Air Heater & Duct Leakage Control	3.6	4.7	2.5	2.7	2.1	2.4
Variable Frequency Drives	9.1	11.9	7.2	9.4	6.6	7.9
Blade Path Upgrade (Steam Turbine)	11.2	66.9	8.9	44.6	6.2	31.0
Redesign/Replace Economizer	13.1	18.7	10.5	12.7	10.0	11.2
Improved O&M Practices	Minimal capital cost					

These costs presented in Table 2 represent both capital and O&M costs. Investments in HRI measures at EGUs should also result in fuel savings which can offset some or all of the cost of the HRI. However, the EPA does not suggest that HRI measures should meet any particular economic criterion (*e.g.,* pay for themselves through reduced fuel costs) in order to be applied in state plans for the establishment of source-specific standards of performance.

The technical applicability and efficacy of HRI measures and the cost of implementing them are dependent upon site specific factors and can vary widely from site to site. Because there is inherent flexibility provided to the states in applying the standards of performance, there is a wide range of potential outcomes that are highly dependent upon how the standards are applied (and to what degree states take into consideration other factors, including remaining useful life).

Because the heat rate improvement technologies result in fuel savings and other potential cost savings and the listed candidate technologies are the types of improvements and equipment upgrades that have been previously undertaken, the EPA finds that the costs of the HRI technologies and practices that have been identified as the BSER and provided in Table 1 are reasonable.

f. Non-Air Quality Health and Environmental Impacts, Energy Requirements, and Other Considerations

As directed by CAA section 111(a)(1), the EPA has taken into account non-air quality health and environment requirements for each of the candidate BSER technologies listed in Tables 1 and 2. None of the candidate technologies, if implemented at a coal-fired EGU, would be expected to result in any deleterious effects on any of the liquid effluents (*e.g.,* scrubber liquor) or solid by-products (*e.g.,* ash, scrubber solids). The EPA has also taken into account energy requirements. All of these candidate technologies, when implemented, would have the effect of improving the efficiency of the coal-fired EGUs to which they are applied. As such, the EGU would be expected to use less fuel to produce the same amount of electricity as it did prior to the efficiency (heat rate) improvement. None of the candidate technologies is expected to impose any significant additional auxiliary energy demand.

Implementation of heat rate improvement measures also would achieve reasonable reductions in CO_2 emissions from designated facilities in light of the limited cost-effective and technically feasible emissions control opportunities. In the same vein, because existing sources face inherent constraints that new sources do not, existing sources present different, and in some ways more limited, opportunities for technological innovation or development. Nevertheless, the final emissions guidelines encourage technological development by promoting further development and market penetration of equipment upgrades and process changes that improve plant efficiency leading to reasonable reductions in CO_2 emissions.

3. Discussion of ''Rebound Effect''

At proposal, the EPA solicited comment on potential CO_2 emissions and generation changes that might occur as a result of efficiency improvements at designated facilities, including potential increased generation to the point of a net increase in emissions from a particular facility, also referred to as the ''rebound effect.'' In some instances, it is possible that certain sources increase in generation (relative to some baseline) as a result of lower operating costs from adoption of candidate technologies to improve their efficiency. The EPA conducted analysis and modeling for the ACE proposal, and found that while there were instances (in some scenarios) where a limited number of designated facilities that adopted HRI increased generation to the point of increasing mass emissions notwithstanding the lower emissions rate resulting from HRI adoption, due to their improved efficiency and marginally improved economic competitiveness relative to other electric generators, the designated facilities as a group reduce emissions because they can generate higher levels of electricity with a lower overall emission rate.

Some commenters on the proposed rule highlighted environmental and legal concerns with the rebound effect as undermining the BSER, while others commented that the concern was de minimis, not rooted in any legal basis, and not germane to establishing standards of performance. On one side, some commenters asserted that the determined BSER is not properly designed because it would not achieve emission reductions if it results in higher utilization and, therefore, emission increases. Some doubted the EPA claims of lower systemwide emissions and said the EPA had not adequately analyzed the concern. Some asserted that the assumptions used in the analysis do not reflect real world considerations that efficiency of all fossil fuel plants degrades over time, rather than being static. Also, some asserted that the EPA had understated the amount of coal capacity that will likely retire in its analysis, and, thus, the remaining coal fleet will consist of more efficient and competitive units that may end up emitting more than the EPA's analysis shows. In addition, some asserted that the EPA's proposed NSR reforms allow sources to extend lifetimes without requiring controls, exacerbating rebound issues.

Other commenters asserted that CAA section 111 does not require the Agency to obtain absolute reductions in emissions at a sector-wide level, and the EPA's obligation is to determine the BSER through evaluation of emissions performance per output at the unit-level. Some commenters stated that any rebound effect from more efficient units is most likely to come at expense of lower-efficiency coal units, negating the effect. Also, commenters contended that rebound is unlikely to change the

dispatch order and/or utilization of units based upon the levels of HRI that are reasonable and part of ACE, and, thus, any rebound effect would be de minimis.

The EPA agrees with the commenters who do not see the rebound effect as undermining the BSER determination in this rule, because this rule is aimed at improving a source's emissions *rate* performance at the unit-level. Indeed, in repealing the ''percent reduction'' requirement from the 1977 CAA Amendments, Congress expressly acknowledged that standards of performance were to be expressed as an emissions rate.[185] In addition, as noted above, this rule results in overall reductions of emissions of CO_2. Because the BSER in this rule improves the emissions rate of designated facilities and results in overall reductions, the limited rebound effect that may occur does not undermine the BSER.

Nonetheless, to the extent commenters have asserted that ACE would cause an increase in aggregate CO_2 emissions due to some sources operating more, this concern is not supported by our analysis. The EPA conducted updated modeling and analysis for the final ACE rule (see Chapter 3 of the RIA for more details) and confirmed that aggregate CO_2 emissions from the group of designated facilities are anticipated to decrease (outweighing any potential CO_2 increases related to increased generation by certain units).

The final ACE rule establishes the BSER, and a framework for states to determine rate-based standards of performance for designated facilities. The BSER for ACE is expressed as a rate-based approach, which should necessarily result in rate-based emission reductions. The modeling and analysis show individual units and the entire coal fleet reducing emission rates, as well as an aggregate decrease in mass emissions. As such, any potential ''rebound effect'' is determined to be small and manageable (if necessary) and does not require any specific remedy in the final rule. However, if a state determines that the source-specific factors of a designated facility dictate that the rebound effect is an issue that should be considered in setting the standard of performance, that is within the state's discretion to consider in the process of establishing a standard of performance for that particular existing source. As noted above and as a result of modeling, the EPA does not expect these considerations to be necessary in the state plan development process.

4. Systems That Were Evaluated But Are Not Part of the Final BSER

The EPA identified several systems of GHG emission reduction that may be applied at or to designated facilities but did not propose that they should be part of the BSER. The Agency solicited comment on the rationale for eliminating or not identifying those alternative systems as part of the BSER. After consideration of public comments, the EPA is not revising its proposed determination and is not including any additional or different systems of emission reduction in the final BSER determination. A description of the considered systems of emission reduction that are not part of the final BSER along with a summary of significant public comments is provided below.

The EPA previously considered co-firing (including 100 percent conversion) with natural gas and implementation of carbon capture and storage (CCS) as potential BSER options. *See* 80 FR 64727. In that analysis, the EPA found some natural gas co-firing and CCS measures to be technically feasible but determined that switching from coal to gas is ''a relatively costly approach to CO_2 reductions at existing coal steam boilers when compared to other measures such as heat rate improvements. . .'' [186] and that the cost to implement CCS for existing source standards is not reasonable and that ''CCS is not an appropriate component of the [BSER].'' [187] A more detailed description of the current consideration of these technologies is provided below.

a. Natural Gas Repowering

Coal-fired utility boilers can reduce their emissions by firing natural gas instead of—or in combination with—coal. This can be done in three different ways: (1) By repowering, (2) by co-firing, or (3) by refueling. *Repowering* is when an existing coal-fired boiler is replaced with one or more natural gas-fired stationary combustion turbines, while still utilizing the existing steam turbines. *Co-firing* and *refueling* involve the burning of natural gas at an existing boiler.[188]

In the ACE proposal, the EPA did not consider natural gas repowering as a potential system of emission reduction (*i.e.,* as a candidate for the BSER) based on the reasoning that this option would fundamentally redefine the existing sources subject to the rule.[189] Some commenters argued, however, that coal-fired utility boilers can reduce emissions through natural gas repowering and it should be the BSER. Other commenters argued that the 'redefining the source' concept from PSD was inappropriate for application to NSPS. After considering public comments on this issue, the EPA concludes that repowering should not be considered for purposes of CAA section 111(d). As described in more detail below, repowering is not a ''system'' of emission reduction for a source at all because it cannot be applied to the existing sources subject to this rule (steam generating units). Rather, repowering these existing units would replace them entirely with a different type of source (stationary combustion turbines) that would be subject to the NSPS in 40 CFR part 60, subpart TTTT.[190] Even if repowering were to be evaluated to determine if it was part of the BSER, the EPA has found non-air quality health and environmental impacts and energy requirements that demonstrate that repowering is not part of the BSER.[191]

As described above, a ''standard of performance'' under CAA section 111(d) must be ''establishe[d]'' for an ''existing source.'' However, repowering a coal-fired boiler—that is, the replacement of a boiler with a stationary combustion turbine—creates a ''new source,'' which is regulated directly by the EPA under 40 CFR part 60, subpart TTTT (establishing standards for the control of GHG emissions from new, modified, or reconstructed steam generating units, IGCCs, or *stationary combustion turbines*). The ''best system of emission reduction'' for an *existing* source,

[185] *See* 1990 CAA Amendments, section 403, 104 Stat. at 2631 (''the Administrator shall promulgate revised regulations for standards of performance . . . that, at a minimum, require any source subject to such revised standards to emit sulfur dioxide at a *rate* not greater than would have resulted from compliance by such source with the applicable standards of performance under this section prior to such revision'') (emphasis added).

[186] Technical Support Document (TSD) for Carbon Pollution Guidelines for Existing Power Plants: Emission Guidelines for Greenhouse Gas Emissions from Existing Stationary Sources: Electric Utility Generating Units; Chapter 6, June 10, 2014, Available at Docket Item No. EPA–HQ–OAR–2013–0602–36852.

[187] *Id.* Chapter 7

[188] Co-firing and refueling are discussed in section III.E.4.b of this preamble.

[189] *See* 83 FR 44753.

[190] The EPA is not concluding whether or not the 'redefining the source' concept can or should be applied in the context of the NSPS program.

[191] These non-air quality health and environmental impacts and energy requirements are discussed in more detail below in the discussion of refueling and co-firing. Except to the extent that discussion involves the inefficient combustion of natural gas, the non-air quality health and environmental impacts and energy requirements found for these technologies are similar, if not identical, to those the EPA has found for repowering.

therefore, simply cannot be the creation of a *new* source that is regulated under separate authority. Otherwise, the EPA could subvert the provisions of CAA section 111(d) (which authorizes states to regulate existing sources in the first instance) and require all existing sources to transform into ''new sources,'' which the Agency can directly regulate under CAA section 111(b). Therefore, repowering a coal-fired boiler is not a ''system'' within the scope of the BSER.

b. Natural Gas Co-Firing and Refueling

Some coal-fired utility boilers use natural gas or other fuels (such as distillate fuel oil) for startup operations, for maintaining the unit in ''warm standby,'' or for NO_X control (either directly as a combustion fuel or in configuration referred to as natural gas reburn). During such periods of natural gas co-firing, an EGU's CO_2 emission rate is reduced as natural gas is a less carbon intensive fuel than coal. For example, at 10 percent natural gas co-firing, the net emissions rate (lb/MWh-net) of a typical unit could decrease by approximately 4 percent.

Commenters stated that the EPA should determine that natural gas co-firing is the BSER because it is technically feasible, readily available, achieves significant emission reductions, and may be the most cost-effective option for some facilities. Some commenters also provided data (from EIA) to assert that co-firing is widely used and adequately demonstrated at coal-fired EGUs. The commenters contended that a significant number of coal-fired EGUs have the capacity to burn both natural gas and coal. One commenter asserted that 35 percent of coal-fired utility boilers across 33 states co-fired with natural gas. Another commenter provided a table listing coal-fired EGUs that have recently converted to natural gas or are co-firing with natural gas. One commenter cited data from the EIA and claimed that 48 percent of steam generating EGUs are already co-firing some amount of natural gas.

While the EPA agrees with the assertion that there are existing coal plants that have some access to a supply of natural gas, the EPA disagrees that the data demonstrate that co-firing is a system of emission reduction that has been or that could be implemented on a nationwide scale at reasonable cost. The EPA believes that commenters have conflated operational co-firing (*i.e.,* co-firing coal and natural gas to generate electricity) with startup co-firing (*i.e.,* only using natural gas to heat up a utility boiler or to maintain temperature during standby periods). Coal-fired boilers always use a secondary fuel (most often natural gas or distillate fuel oil), utilizing burners specifically configured to bring the boiler from a cold, non-operating status to a temperature where coal, the primary fuel, can be safely introduced for normal operations.

The EPA conducted its own analysis using EIA fuel use data from 2017.[192] The EPA's analysis supports the assertion that nearly 35 percent of coal-fired units co-fired (in either sense of co-firing as described above) with natural gas in 2017. However, very few—less than four percent of coal-fired units—co-fired with natural gas in an amount greater than five percent of the total annual heat input. This strongly suggests that most of the natural gas that was utilized at these sites was used as a secondary fuel for unit startup or to maintain the unit in ''warm standby'' rather than as a primary fuel for generation of electricity. Further, the small number of units that co-fired with greater than five percent natural gas during 2017 operated at an average capacity factor of only 24 percent—indicating that they are not the most economical units and are not dispatched as frequently as those units that used less than five percent natural gas. For comparison, in 2017, 62 percent of coal-fired utility boilers co-fired with some amount of distillate fuel oil and, as with natural gas, the vast majority of those units used less than 5 percent distillate fuel oil (again, strongly suggesting that it is primarily used as a secondary fuel for startup and warm standby).

The EPA also disagrees that the data demonstrate that co-firing can be considered at the national level as an adequately demonstrated system of emission reduction and that there are easy paths to expand it at a reasonable cost. The EIA 923 fuel use data indicated that about 65 percent of coal-fired utility boilers use something other than natural gas as the secondary fuel for periods of startup and standby operations. Distillate fuel oil is by far the most commonly used secondary fuel. While the use of distillate fuel oil does not necessarily mean that the unit lacks access to natural gas, it suggests that for many of those units, there is an inadequate supply to serve even as a secondary fuel for startup and standby operations. The 2018 average price [193] of distillate fuel oil was more than four times higher than that of natural gas; so, if there was an adequate supply of natural gas, then it would be much more economically favorable to utilize that natural gas rather than the much more expensive distillate fuel oil. As explained earlier, for plants that require additional or new pipeline capacity, the capital cost of constructing new pipeline laterals is approximately $1 million per mile of pipeline built. Therefore, a 50-mile gas pipeline would add $50 million—$100/kW for a typical 500 MW unit—to the capital costs of adding co-firing capability.

As mentioned earlier, the EPA has previously evaluated the costs associated with using natural gas refueling or co-firing as a GHG mitigation option. *See* 79 FR 34875. For a typical base-load coal-fired EGU, the average cost of CO_2 reductions achieved through co-firing with 10 percent natural gas would be approximately $136 per ton of CO_2. While a utility boiler that is converted to 100 percent natural gas-fired can offset some of the capital costs by reducing its fixed operating and maintenance costs (though, as discussed below, the costs would still be considerably higher than the HRI technologies that the EPA identified as the BSER), a unit that is co-firing natural gas with coal would continue to bear the fixed costs associated with equipment needed for coal combustion, raising the cost per ton of CO_2 reduced.

In determining the BSER, CAA section 111(a)(1) also directs the EPA to take into account non-air quality health and environmental impacts and energy requirements. The EPA is unaware of any significant non-air quality health or environmental impacts associated with natural gas co-firing. However, in taking energy requirements into account, the EPA notes that co-firing natural gas in coal-fired utility boilers is not the best or most efficient use of natural gas and, as noted above, can lead to less efficient operation of utility boilers. NGCC stationary combustion turbine units are much more efficient at using natural gas as a fuel for generating electricity and it would not be an environmentally positive outcome for utilities and owner/operators to redirect natural gas from the more efficient NGCC EGUs to the less efficient utility boilers to satisfy an emission standard at the utility boiler. Some commenters disagreed with the EPA's claim that increased use of natural gas in a utility boiler would

[192] See the memorandum ''2017 Fuel Usage at Affected Coal-fired EGUs,'' available in the rulemaking docket (Docket ID No. EPA–HQ–OAR–2017–0355).

[193] The 2018 average U.S. power generation fuel costs for natural gas was $3.52 per million Btu while the cost for distillate fuel oil for power generation was $16.13 per million Btu. U.S. EIA Short Term Energy Outlook, *https://www.eia.gov/outlooks/steo/tables/pdf/2tab.pdf.*

come at the expense of its use in more efficient NGCC units. The EPA did not intend to imply that there is now (or that there will be) a restricted supply of natural gas. Instead, the EPA suggested that, if there were to be an increase in the use of natural gas, the more efficient use for that increased natural gas would be as fuel for under-utilized NGCC units rather than in less efficient utility boilers. The EPA does not believe that establishing a BSER that, for all practical purposes, would mandate increased use of natural gas in utility boilers is good policy.

Given that a natural gas co-firing-based BSER would result in standards that are more costly than standards based on application of the candidate technologies for heat rate improvements, that such a BSER would encourage inefficient use of natural gas, that implementation would be even more expensive and challenging for those units that currently have limited or no access to natural gas, the EPA concludes that co-firing natural gas in coal-fired boilers is not the BSER.

Some commenters requested that co-firing be added to the list of HRI candidate technologies (discussed in more detail below), the combination of which would represent the BSER. However, whereas all coal-fired utility boilers can apply (or have already applied) HRI measures, natural gas co-firing does not satisfy the same CAA section 111(a)(1) criteria (see above). Moreover, co-firing can negatively impact a unit's heat rate (efficiency) due to the high hydrogen content of natural gas and the resulting production of water as a combustion by-product.[194] And depending on the design of the boiler and extent of modifications, some boilers may be forced to de-rate (a reduction in generating capacity) to maintain steam temperatures at or within design limits, or for other technical reasons. Accordingly, natural gas co-firing cannot be applied in combination with the HRI measures identified as the BSER. However, natural gas co-firing might be appropriate for certain sources as a compliance option. For a discussion of compliance options, see below section III.F.2.

Some commenters also suggested that the EPA's concerns about using gas inefficiently were not persuasive because the United States has such an abundant supply of natural gas. The EPA disagrees for many of the same reasons that the Agency relied upon to reject the consideration of natural gas as the BSER. First, it is on the higher end of the cost of the measures the EPA considered even for units with ready natural gas availability; second, many designated facilities do not have natural gas availability, so it is not broadly applicable.

The same factors discussed above lead the Agency to conclude that refueling also cannot be BSER. *Refueling* is when an existing coal-fired boiler is converted to a natural gas-fired boiler (*i.e.,* firing 100% natural gas). In the ACE proposal, the EPA did not consider natural gas refueling as a potential system of emission reduction (*i.e.,* as a candidate for the BSER) based on the reasoning that this option would fundamentally redefine the existing sources subject to the rule.[195] Some commenters argued, however, that coal-fired utility boilers can reduce emissions through natural gas refueling and should be the BSER. Other commenters argued that the 'redefining the source' concept from PSD was inappropriate for application to NSPS.[196] After considering public comments on this issue, the EPA concludes that natural gas refueling, like natural gas co-firing, is not the BSER.

The EPA has previously evaluated the costs associated with using natural gas refueling or co-firing as a GHG mitigation option.[197] The capital costs of plant modifications required to switch a coal-fired EGU completely to natural gas are roughly $100–300/kW, not including any costs associated with constructing additional pipeline capacity. Many coal-fired plants do not have immediate and ready access to any supply of natural gas. Others that do have access to a supply of natural gas have only a limited supply (*i.e.,* enough for startup and warm standby firing, but not enough for full load firing). For plants that require additional pipeline capacity, the capital cost of constructing new pipeline laterals is approximately $1 million per mile of pipeline built. A 50-mile gas pipeline would add $50 million—$100/kW for a typical 500 MW unit—to the capital costs of the conversion.

While a coal-fired utility boiler that is converted to a 100 percent natural gas-fired boiler could offset some of the capital costs by reducing its fixed operating and maintenance costs, in most cases, the most significant cost change associated with switching from coal to gas is likely to be the difference in fuel cost. Using the EIA's projections of future coal and natural gas prices, switching a utility boiler from coal-fired to natural gas-fired could more than double the unit's fuel cost per MWh of generation. For a typical base-load coal-fired EGU, the average cost of CO_2 reductions achieved through gas conversion would be approximately $75 per ton of CO_2. This cost could also be much higher as there would very likely be an increase in natural gas prices corresponding to the increased demand from widespread coal-to-gas conversion.

The EPA also found that consideration of energy requirements (as required by CAA section 111(a)(1)) provides additional reasons why refueling natural gas in a utility boiler should not be considered BSER.[198] Burning natural gas in a utility boiler is not the best use of such fuel as it is much less efficient than burning it in a combustion turbine. New natural gas combined cycle (NGCC) units can convert the heat input from natural gas to electricity with an efficiency of more than 50 percent.[199] A coal-fired utility boiler that is repurposed to burn 100 percent natural gas will see a reduction in efficiency of up to five percent (to less than 40 percent efficiency) as the higher hydrogen content in the natural gas fuel will lead to higher moisture losses that will negatively impact the boiler efficiency.[200] Widespread refueling is not a practice that the EPA should be promoting as it is not the most efficient use of natural gas. Utilities choosing to increase use of natural gas in a combined cycle or simple cycle combustion turbine is a more efficient way to utilize natural gas for electricity generation. In reaching this determination, the EPA is mindful of Congress's direction to ''tak[e] into account . . . energy requirements'' in determining the best system of emission reduction in CAA section 111(a)(1). Consideration of ''energy requirements'' is one of the factors informing the EPA's judgment that it would be inappropriate to base performance standards on an

[194] Natural gas firing or co-firing degrades the boiler's efficiency (relative to the use of coal) primarily due to the increased production of water. Some of the heat that is produced in the combustion process will be used to heat that flue gas moisture (which will exit with the stack gases) rather than to converting water in the boiler tubes to steam. The efficiency declines because there is less heat available to produce useful steam.

[195] *See* 83 FR 44753.

[196] As with repowering, the EPA is not concluding whether or not the ''redefining the source'' concept can or should be applied in the context of the NSPS program.

[197] *See* 79 FR 34875.

[198] *See* 83 FR 44762.

[199] ''Cost and Performance Baseline for Fossil Energy Plants Volume 1a: Bituminous Coal (PC) and Natural Gas to Electricity'' Rev. 3, DOE/NETL–2015/1723 (July 2015).

[200] ''Leveraging Natural Gas: Technical Considerations for the Conversion of Existing Coal-Fired Boilers'', Babcock Power Services, Presented at 2014 ASME Power Conference (July 2014), Baltimore, MD. Available in the rulemaking docket.

inherently energy-inefficient practice such as refueling.

NGCC units have become the preferred option for intermediate and baseload natural gas power generation. Other technologies (such as simple cycle aeroderivative turbines) offer significant advantages for peaking purposes in that they can start up quickly and require fewer staff to operate. Some combination of aeroderivative turbines and flexible combined cycle units offer advantages in both efficiency and the flexibility to change loads when compared to utility boilers. For these reasons, the power sector has moved away from the use of gas-fired boilers. There have been no new natural gas-fired utility boilers built since the 1980s.

There have been some cases where coal-fired utility boilers have chosen to refuel (*i.e.,* have chosen to convert to natural gas-firing). In those cases, the motivation was largely to preserve reserve capacity without investing in the air pollution controls needed to meet air emission standards—especially MATS.[201] The EPA examined fuel use data submitted by plant owner/operators to the U.S. Energy Information Administration (EIA) on Form 923.[202] According to that data, there were 131 natural gas-fired utility boilers [203] in 2012 and 170 such units in 2017. The average capacity factor for those units was only 11 percent in 2012 and 2017. Between 2012 (before the MATS compliance date) and 2017 (after MATS was fully in effect), 39 utility boilers converted from coal-fired units to become natural gas-fired utility boilers. Those natural gas-fired utility boilers operated at an average capacity factor of less than 10 percent, indicating that they were likely utilized only during periods of high demand.

These non-air quality health and environmental impacts and energy requirements demonstrate that refueling is not the BSER.

c. Biomass Co-Firing

The EPA previously proposed that co-firing of biomass in coal-fired utility boilers is not the BSER for existing fossil fuel-fired sources due to cost and achievability considerations.[204] Although biomass co-firing methods are technically feasible and can be cost-effective for some designated facilities, these factors and others (namely, that any potential net reductions in emissions from biomass use occur outside of the regulated source and are outside of the control of the designated facility, which is incompatible with the interpretation of the EPA's authority and the permissible scope of BSER as set forth in section II above) are the considerations that prevent its adoption as the BSER for the source category.

In the ACE proposal, the EPA sought comment on the inclusion of forest-derived and non-forest biomass as non-BSER compliance options for affected units to meet state plan standards.[205] In response, the EPA received comments both supporting and opposing the use of biomass for compliance (as discussed in section III.F.2.b); however, commenters also spoke to the appropriateness of including biomass firing as part of the BSER. Some commenters noted that co-firing with biomass cannot be a ''system of emission reduction'' as it increases CO_2 emissions at the source. Commenters further asserted that the EPA has failed to demonstrate how firing biomass meets the CAA section 111 requirements and the criteria for qualifying as a system of emission reduction described in the Proposed Repeal and the ACE proposal.

Upon consideration of comments and in accordance with the plain language of CAA section 111 (discussed above in section II.B), the EPA is now clarifying that biomass does not qualify as a system of emission reduction that can be incorporated as part of, or in its entirety, as the BSER. As described in section III.F.2 of this preamble. the BSER determination must include systems of emission reduction that are achievable at the source. While the firing of biomass occurs at a designated facility, biomass firing in and of itself does not reduce emissions of CO_2 emitted from that source. Specifically, when measuring stack emissions, combustion of biomass emits more mass of emissions per Btu than that from combustion of fossil fuels, thereby increasing CO_2 emissions at the source. Recognition of any potential CO_2 emissions reductions associated with biomass utilization at a designated facility relies on accounting for activities not applied at and largely not under the control of that source, including consideration of offsite terrestrial carbon effects during biomass fuel growth, which are not a measure of emissions performance at the level of the individual designated facility. Use of biomass in affected units is therefore not consistent with the plain meaning of ''standard of performance'' and cannot be considered as part of the BSER.[206]

Additionally, many commenters agreed with the ACE proposal that biomass co-firing should not be part of the BSER because it is not sufficiently cost-effective, there is not a reliable supply of biomass fuel accessible nationally, co-firing with biomass has a negative impact on unit heat rate, and co-firing requirements would ''redefine the source.'' Many commenters supported inclusion of fuel co-firing as a component of the BSER but focused primarily on argument for natural gas co-firing (as discussed earlier). Some of these commenters specifically asserted that biomass use is a widely available and proven GHG reduction technology.

As discussed by the EPA previously in the ACE proposal and other instances,[207] biomass fuel use opportunities are dependent upon many regional considerations and limitations—namely fuel supply proximity, reliability and cost—that prevent its adoption as BSER on a national level (whereas nearly all sources can or have implemented some form of HRI measures). The infrastructure, proximity, and cost aspects of co-firing biomass at existing

[201] *See* 40 CFR part 63, subpart UUUUU.

[202] Monthly fuel use data is submitted to the EIA on Form 923. Available at *https://www.eia.gov/electricity/data/eia923/.* For details of the EPA data analysis, see the memorandum ''2017 Fuel Usage at Affected Coal-fired EGUs'' available in the rulemaking Docket ID No. EPA–HQ–OAR–2017–0355.

[203] Natural gas-fired utility boilers are those with capacity of more than 25 MW that use more than 90 percent natural gas on a heat input basis.

[204] *See* ACE proposal and 80 FR 64756.

[205] *See* 83 FR 44766.

[206] Notwithstanding this conclusion in the context of CAA section 111(d), the EPA believes that a PSD permitting authority may still reach the conclusion that use of some type(s) of biomass is BACT for greenhouse gases in the context of a PSD permit application where the applicant proposes to use biomass, as discussed in the EPA's Guidance for Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production (March 2011). While biomass combustion may result in more greenhouse gas emissions (in particular CO_2) per unit of production than combustion of fossil fuels, a comparative analysis of biomass and other fuels may not be required in the BACT context. As EPA has observed, ''where a proposed bioenergy facility can demonstrate that utilizing a particular type of biogenic fuel is fundamental to the primary purpose of the project, then at the first step of the top-down process, permitting authorities can rely on that to determine that use of another fuel would redefine the proposed source.'' Bioenergy BACT Guidance at 15. Moreover, even if biomass is compared to fossil fuels and ranked lower at Step 3 of a top-down BACT analysis, broader offsite environmental, economic, and energy considerations related to biomass use (*e.g.,* any potential offsite net carbon sequestration associated with growth of the biomass feedstock) may be considered in Step 4 of a top-down BACT analysis. *See* Bioenergy BACT Guidance at 20–21. It is therefore consistent to determine that the firing of biomass does not qualify as a ''standard of performance'' for setting or complying with the BSER because it does not reduce the GHG emissions of a fossil fuel-fired source, while also allowing the consideration of any potential offsite environmental, economic, or energy attributes when considering an application that treats biomass as BACT for a proposed biomass facility in the PSD permitting context.

[207] *See* 80 FR 64756.

coal EGUs are similar in nature and concept to those of natural gas. While there are a few existing coal-fired EGUs that currently co-fire with biomass fuel, those are in relatively close proximity to cost-effective biomass supplies. Therefore, even if biomass firing could be considered a ''system of emission reduction,'' the EPA is not able to include the use of biomass fuels as part of the BSER in this action due to the current cost and achievability considerations and limitations discussed above. Additional discussion on biomass is provided in section III.F.2.b. below.

d. Carbon Capture and Storage (CCS) [208]

In the ACE proposal, the EPA noted that while CCS is an advanced emission reduction technology that is currently under development, the Agency must balance the promotion of innovative technologies against their economic, energy, and non-air quality health and environmental impacts. The EPA proposed that neither CCS nor partial CCS are technologies that can be considered the BSER for existing fossil fuel-fired EGUs and explicitly solicited comment on any new information regarding the availability, applicability, costs, or technical feasibility of CCS technologies.

Many commenters agreed with EPA's proposed finding that CCS (including partial CCS) should not be part of the BSER. The commenters stated that it is not adequately demonstrated, sufficiently cost-effective, or nationally available. Other commenters disagreed and claimed that CCS is technically feasible and adequately demonstrated and should be part of BSER, asserting that the EPA has previously provided evidence in the record during the 2016 denial of petitions for reconsideration of the CPP that CCS had been successfully implemented at power plants. Commenters also asserted that there are many vendors that offer carbon capture technologies for power plants, which demonstrates that the technology is commercially available and adequately demonstrated.

CCS is a difficult and complicated process, requiring numerous pieces of process equipment to capture CO_2 from the exhaust gas, compress it for transport, transport it in a CO_2 pipeline, inject it, and then monitor the injection space to ensure the CO_2 remains stored. Currently there are only two large-scale commercial applications of post-combustion CCS at a coal-fired power plant—the Boundary Dam project in Saskatchewan, Canada and the Petra Nova project at the W.A. Parish plant near Houston, Texas.[209] Commenters noted that both of the demonstration projects were heavily subsidized by government support and were able to generate additional income from the sale of captured CO_2 for enhanced oil recovery (EOR) and, without these subsidies, neither project would have been economically viable.

Commenters addressed the cost of installing CCS on an existing coal-fired EGU and noted that it can be much costlier and more technically challenging to retrofit the technology to an existing EGU as compared to installation on a newly constructed unit (where the system can be incorporated into the design and space allocation of the new plant). Other commenters claimed that CCS can achieve significant emission reductions (up to 90 percent), that there is opportunity for some sources to generate income from the sale of captured CO_2, and that there are additional financial incentives from the recently approved 2018 Internal Revenue Code (IRC) section 45Q tax credits for stored CO_2, so now CCS may be more cost-effective than HRI options for some facilities. One commenter performed modeling runs that included the section 45Q tax credit and found that, for some sources, CCS would provide much greater emission reductions than HRI options at a reasonable cost and concluded that the EPA should include CCS as part of the BSER. Other commenters minimized the impact of the section 45Q tax credit for a variety of reasons.

Several commenters claimed that access to appropriate CO_2 storage locations is critical to the feasibility and cost of CCS. They described the geographic limitations of both deep saline aquifers and depleted oil fields (EOR fields) noting that 15 states have little or no demonstrated storage capacity or have very limited storage capacity and that EOR sites are similarly geographically limited, with 19 states having little or no demonstrated EOR opportunity. However, other commenters claimed that a technology need not be feasible at every site to be a component of BSER especially since the EPA is relying on site-specific analyses. The commenters noted that not all HRI options are applicable to every source, so the EPA cannot disregard CCS from the BSER options based on ''national availability.''

Commenters noted that 60 GW (or about 20 percent) of the coal-fired power plant capacity might be amenable to CCS based on locality and that North America has widespread and abundant geologic storage options with the capacity to sequester over 500 years of the U.S.'s current energy-related CO_2 emissions. Commenters claimed that 90 percent of existing coal-fired power plants are within 100 miles from the center of a basin with adequate storage capacity and more than half of the existing plants are less than 10 miles from the center of a basin.

The EPA has considered all these public comments and has concluded that, as proposed, CCS is not the BSER for emissions of CO_2 from existing coal-fired EGUs—nor does it constitute a component of the BSER, as some commenters have suggested. As discussed in section III.E.1, above, concerning the ''guiding principles'' for identifying the BSER under CAA section 111(d), the BSER is based on what is adequately demonstrated and broadly achievable across the country. Under CAA section 111(b)(1), the EPA determines ''standards of performance'' for new sources and under section 111(d)(1), the states determine ''standards of performance'' for existing sources within their jurisdiction. Importantly, the term ''standard of performance'' is given a uniform definition under section 111(a)(1) for purposes of both new and existing sources, and, in accordance with that definition, the Administrator is required to determine the BSER as a predicate for the standards of performance for both new and existing sources. In this manner, the text and structure of section 111 indicate that the EPA must make the BSER determination at the national, source-category level. Thus, the EPA disagrees with the commenters who argue that because the EPA is emphasizing that standard setting will be done on a unit-by-unit (rather than fleetwide) basis, all viable emission reduction options should be evaluated at the unit level.

Whereas HRI measures are broadly applicable to the entire existing coal-

[208] CCS is sometimes referred to as Carbon Capture and Sequestration. It is also sometimes referred to as CCUS or Carbon Capture Utilization and Storage (or Sequestration), where the captured CO_2 is utilized in some useful way and/or permanently stored (for example, in conjunction with enhanced oil recovery). In this document, the EPA considers these terms to be interchangeable and for convenience will exclusively use the term CCS.

[209] Several commenters noted that the Petra Nova project received funding from the U.S. Department of Energy (DOE) through the Clean Coal Power Initiative and stated that the project is, pursuant to section 402(i) of the Energy Policy Act of 2005 (EPAct05), therefore, precluded from being used to demonstrate that the technology is ''adequately demonstrated'' under section 111 of the CAA. Some commenters noted that the DOE funding was only for the initial 60 MW slip-stream demonstration project, but the CCS project at Petro Nova was later expanded to a 240 MW slip-stream and no federal funding was received for this expansion.

fired power plant fleet, the EPA determines that CCS or partial CCS is not. The EPA agrees that there may be some existing coal-fired EGUs that find the application of CCS to be technically feasible and an economically viable control option, albeit only under very specific circumstances. However, the high cost of CCS, including the high capital costs of purchasing and installing CCS technology and the high costs of operating it, including high parasitic load requirements, prevent CCS or partial CCS from qualifying as BSER on a nationwide basis.

According to the DOE National Energy Technology Laboratory (NETL), the incremental cost from capital expenditures alone of installing partial or full capture CCS [210] on a new coal-fired EGU ranged from $626 (for 16% capture) to $2,098 (for full capture) per kW (2011 dollars).[211] These costs are for new CCS equipment installed on a new facility, but they fairly represent the costs of new CCS equipment installed on an existing facility; indeed, these costs are probably lower than the actual costs of installing new CCS equipment on an existing facility, because the costs of retrofitting pollution controls on an existing facility generally are greater than the costs of installing pollution controls on a new facility. In contrast, as noted elsewhere, the cost of the HRI that constitute the BSER for this rule range from $25–$47 per kW (2016 dollars). Thus, the costs of partial CCS, considering only the capital costs and not the operating costs, are far higher than—more than 13 times—the cost of what the EPA has identified as the BSER.

Viewing the costs of CCS through other prisms yields the same determination. According to NETL, the capital costs of a CCS system with 90 percent capture increases the cost of a new coal-fired power plant approximately 75 percent relative to the cost of constructing a new coal-fired power plant without post-combustion control technology. Furthermore, the additional auxiliary load required to support the CCS system consumes approximately 20 percent of the power plant's potential generation.[212] The NETL Pulverized Coal Carbon Capture Retrofit Database tool (April 2019) [213] estimates that the operating costs of existing coal-fired EGUs range from 22 to 44 $/MWh.[214] The incremental increase in generating costs, including the recovery of capital costs over a 30-year period, due to CCS range from 56 to 77 $/MWh.[215] For reference, according to the EIA, the average electricity price for all sectors in March of 2019 was 103.8 $/MWh.[216] About 60 percent of these latter costs (60 $/MWh) are associated with generation and 40 percent with transmission and distribution of the electricity.[217] Thus, the incremental increase in generating costs due to CCS by itself would equal or exceed the average generation cost of electricity for all sectors. The costs of partial CCS are less than full CCS, but due to economies of scale, costs do not reduce as quickly as reductions in the capture rate. For example, the capital costs of treating only 18 percent of the flue gas (a 16 percent reduction in emissions of CO_2) are about 30 percent of the capital costs of treating all of the flue gas (full capture or a 90 percent reduction in emissions of CO_2). Similarly, at full capture, treating only 18 percent of the flue gas (a 16 percent reduction in emissions of CO_2) still increases the cost of electricity by about 28 percent of the increase that results from treating all of the flue gas.[218] Again, these costs are probably lower than the actual costs of installing new CCS equipment on an existing facility. Not only are these costs far higher than what the EPA has identified as the BSER, they would almost certainly force the closure of the coal-fired power plants that would be required to install them. Many of those plants have a marginal profit margin, as demonstrated by the high rate of plant closure and the relatively low amounts of operation (*i.e.,* capacity factors) in recent years. Thus, these costs must be considered exorbitant. *See* section III.E.1. for a discussion of the guiding principles in determining the BSER.

As noted above, the Boundary Dam project in Saskatchewan, Canada and the Petra Nova project at the W.A. Parish plant near Houston, Texas are the only large-scale commercial applications of post-combustion CCS at a coal-fired power plant. They both have retrofit CCS or partial CCS, and they both received significant governmental subsidies—including, for the Petra Nova project, both direct federal grants from the DOE through the Clean Coal Power Initiative and the IRC section 45Q tax credits—and relied on nearby EOR opportunities. Due to the high costs of CCS, all of these subsidies and EOR opportunities were essential to the commercial viability of each project.[219]

Some commenters have asserted that the costs of CCS are reasonable and explain, as a central part of their assertion, that the availability of tax credits under section 45Q, as revised by the Bipartisan Budget Act of 2018, significantly lowers the costs of CCS. In fact, they have asserted, that the tax credits, which have an initial value of $35 per tonne (*i.e.,* metric ton) for CO_2 stored through EOR, offset about 70% of the cost of CCS, with EOR offsetting the rest.[220] However, the section 45Q tax credits are limited in time: The credit for equipment placed in service after the date of enactment of the Bipartisan Budget Act of 2018 is available, in general, only for facilities and equipment for which construction begins before January 1, 2024. IRC section 45Q(d)(1). Under the present rule, state plans are not required to be submitted until mid-2022 and the states have the authority to determine their sources' compliance schedule; compliance schedules are generally expected to last 24 months (*i.e.,* until mid-2024), but could in some instances be longer, as noted in preamble section

[210] Full capture is considered to occur when 100 percent of the flue gas is treated, resulting in a 90 percent reduction in emissions of CO2 relative to a power plant without carbon capture.

[211] ''Cost and Performance Baseline for Fossil Energy Plants Supplement: Sensitivity to CO2 Capture Rate in Coal-Fired Power Plants,'' une 22, 2015; DOE/NETL–2015/1720 *https://www.netl.doe.gov/projects/files/[FRDoc.SupplementSensitivitytoCO2CaptureRatein[FRDoc.CoalFiredPowerPlants_062215.pdf.*

[212] A CCS system requires both auxiliary steam and electricity to operate. According to NETL, a full capture system consumes 53 MW of direct electrical load and steam that could have otherwise been used to generate approximately 86 MW of electricity.

[213] *https://www.netl.doe.gov/energy-analysis/details?id=2949.*

[214] Existing coal-fired power plants have generally already paid off the initial construction (*i.e.,* capital) expenses.

[215] Variable operating costs represent approximately $15/MWh and the remaining costs are recovered capital over a 30-year period. The capital costs assume the power plant can recover the costs over 30 years. If the actual remaining useful life of the power plant itself is less, the costs would be higher because the capital would have to be recovered over a shorter time period. The average age of the remaining coal fleet is approximately 42 years, and the average age of retirement for coal-fired power plants is currently 54 years (*http://www.americaspower.org/wp-content/uploads/2018/03/Coal-Facts-August-31-2018.pdf*). Therefore, a significant portion of the existing coal-fired will likely retire in less than 30 years.

[216] *https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a.*

[217] *https://www.eia.gov/outlooks/aeo/data/browser/#/?id=8-AEO2019&cases=ref2019&sourcekey=0.*

[218] ''Cost and Performance Baseline for Fossil Energy Plants Supplement: Sensitivity to CO_2 Capture Rate in Coal-Fired Power Plants,'' June 22, 2015; DOE/NETL–2015/1720.

[219] The EPA discussed the government funding and the EOR revenue from the transport of captured CO_2 to the Hilcorp's West Ranch Oil Field in ''Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units,'' 80 FR 64510, 64551 (October 23, 2015).

[220] EPA–HQ–OAR–2017–0355–24266 at 18.

III.F.1.a.(2).[221] In order for sources to implement CCS and be able to rely on the 45Q tax credit, they would have to complete all planning, including arranging all financing, preconstruction permitting, and commence construction within about 18 months (by December 31, 2023) of the state plan submittal. The EPA considers that timetable to be impracticably short for most sources, considering the complexity of implementation of CCS. In addition, the tax credit is, in general, available only for the 12-year period beginning on the date the equipment is originally placed in service. IRC section 45Q(a)(3)–(4). Thus, it would not be available to offset much of the capital costs of the CCS systems that are recovered over a 30-year period.[222] Further, like any federal income tax credit, the 45Q tax credits do not provide a benefit to a company that does not owe federal income tax, and thus it may not benefit some coal-fired power plant owners. Accordingly, the 45Q tax credits cannot be considered to offset the high costs of CCS for the industry as a whole. While nearby EOR opportunities are available for some EGUs, they alone cannot offset the high costs of CCS, as is evident from the comments discussed above.

In addition, nearby EOR opportunities are not available for many EGUs, which, as a result, would incur higher costs for constructing and operating pipelines to transport CO_2 long distances. Throughout the country, 29 states are identified as having oil reservoirs amenable to EOR, of which only 12 states have active EOR operations.[223] The vast majority of EOR is conducted in oil reservoirs in the Permian Basin, which extends through southwest Texas and southeast New Mexico. States where EOR is utilized include Alabama, Arkansas, Colorado, Louisiana, Michigan, Mississippi, Montana, New Mexico, Oklahoma, Texas, Utah, and Wyoming, whereas coal-fired generation capacity is located across the country.[224] For example, Georgia, Minnesota, Missouri, Nevada, North Carolina, South Carolina, and Wisconsin have coal-fired generation capacity but do not have oil reservoirs that have been identified as amenable for EOR. In addition, some of the states with the largest amounts of coal-fired generation capacity have no active EOR operations, including Illinois, Indiana, Kentucky, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. Even in states that are identified as having potential oil and gas storage capacity, the amount of storage resource varies by state. In some states, the total oil and gas storage resource is smaller than the annual energy-related CO_2 emissions from coal, including Indiana and Virginia.[225] The limited geographic availability of EOR, and the consequent high costs of CCS for much of the coal fleet, by itself means that CCS cannot be considered to be available across the existing coal fleet.

The high costs of CCS inform the Administrator's determination that this technology is not BSER. Some commenters have suggested that CCS be treated as BSER for some facilities on a unit-by-unit basis, but the EPA believes that this would be inconsistent with its role under section 111(a)(1) to determine as a general matter what is the BSER that has been adequately demonstrated, taking into account, among other factors, cost. To treat CCS as BSER for a handful of facilities would result in those facilities becoming subject to high costs from CCS—potentially much higher than those imposed on other facilities for whom CCS is not treated as BSER. This potential disparate impact of costs is inconsistent with the Administrator's role in determining BSER and is another reason why the Administrator is finalizing a determination that CCS is not BSER.

Nevertheless, while many commenters argued that CCS should not be considered part of the BSER, they supported its use as a potential compliance option for meeting an individual unit's standard of performance. The EPA agrees with this assessment. Evaluation of the technical feasibility (*e.g.,* space considerations, integration issues, *etc.*) and the economic viability (*e.g.,* the prospects and availability of long-term contractual arrangements for sale of captured CO_2, the cost of constructing a CO_2 pipeline, the availability of tax credits, *etc.*) of a CCS project is heavily dependent on source-specific characteristics. Accordingly, state plans may authorize such projects for compliance with this rule.

F. State Plan Development

1. Establishing Standards of Performance

CAA sections 111(d)(1) and 111(a)(1) collectively establish and define certain roles and responsibilities for the EPA and the states. As discussed in section III.B above, the EPA has the authority and responsibility to determine the BSER. CAA section 111(d)(1) clearly contemplates that states will submit plans that establish standards of performance for designated facilities (*i.e.,* existing sources).

States have broad flexibility in setting standards of performance for designated facilities. However, there is a fundamental obligation under CAA section 111(d) that standards of performance reflect the degree of emission limitation achievable through the application of the BSER, which derives from the definition for purposes of section 111 of ''standard of performance'' in those terms, with no distinction made between new-source and existing-source standards. In establishing such standards of performance, the statute expressly provides that states may consider a source's remaining useful life and other factors. Accordingly, based on both the mandatory and discretionary aspects of CAA section 111(d), a certain level of process is required of state plans: Namely, they must demonstrate the application of the BSER in establishing a standard of performance, and if the state chooses, the consideration of remaining useful life and other factors in applying a standard of performance to a designated facility. The EPA anticipates that states can correspondingly establish standards of performance by performing two sequential steps, or alternatively, as further described later in this section, by performing these two steps simultaneously. The two steps to establish standards of performance are: (1) Reflect the degree of emission limitation achievable through application of the BSER, and, if the state chooses, (2) consider the remaining useful life and other source-specific factors.

[221] By comparison, the implementation period for the CPP began three years after the state plan submittal. *See* 80 FR at 64669.

[222] The NETL Pulverized Coal Carbon Capture Retrofit Database tool (April 2019) defaults to a capital recovery factor based on 30 years. Capital recovery factors based on 10 and 20 years are also selectable. If shorter periods are selected, the $/MWh for capital recovery would be higher. Table 10–12 of The Integrated Planning Model (version 6) uses a 15-year capital recovery factor for environmental retrofits, *https://www.epa.gov/sites/production/files/2019-03/documents/chapter_10.pdf.* Recovering costs over a 12-year period, as opposed to a 30-year period, increased the capital recovery factor by 40 percent.

[223] The United States 2012 Carbon Utilization and Storage Atlas, Fourth Edition, U.S. Department of Energy, Office of Fossil Energy, National Energy Technology Laboratory (NETL) and EPA Greenhouse Gas Reporting Program, *see https://www.epa.gov/ghgreporting.*

[224] U.S. Energy Information Administration, Electric Power Annual 2017, *see https://www.eia.gov/electricity/annual/pdf/epa.pdf.*

[225] The United States 2012 Carbon Utilization and Storage Atlas, Fourth Edition, U.S. Department of Energy, Office of Fossil Energy, National Energy Technology Laboratory (NETL) and U.S. Energy Information Administration, Energy-Related Carbon Dioxide Emissions by State, 2005–2016, *see https://www.eia.gov/environment/emissions/state/analysis/.*

If a state chooses to develop standards of performance through a sequential (*i.e.,* two step) process, the state would as the first step apply the BSER to a designated facility's emission performance (*e.g.,* the average emission rate from the previous three years or a projected emission rate under specific conditions such as load) and calculate the resulting emission rate. In this step, states fulfill the obligation that standards of performance reflect the degree of emission limitation achievable by evaluating the applicability of each of the candidate technologies that comprise the BSER to a specific designated facility and calculating a corresponding standard of performance based on the application of all candidate technologies that the state determines are applicable to the specific designated facility. A state may determine the most appropriate methodology to calculate a standard of performance (which for purposes of this regulation will be in the form of an emission rate, as further described in section III.F.1.c. of this preamble) by applying the BSER to a designated facility based on the characteristics of the specific source (*e.g.,* load assumptions and compliance timelines). For example, a state can start with the average emission rate of a particular designated facility and adjust it to reflect the application of each candidate technology and the associated emission rate reduction.

As the second step, under this two-step, sequential process approach, after the state calculates the emission rate that reflects application of the BSER, the state may adjust that rate by considering the remaining useful life of the designated facility and other source-specific factors. It should be noted that the state is not required to take this second step and consider remaining useful life and other factors. Rather, the state has the discretion to do so. A discussion on how a state can consider remaining useful life and other factors, if it so chooses, can be found in section III.F.1.b. below. States also have the discretion to apply a specific standard of performance to a group of existing sources within their jurisdiction, or to all existing sources within their jurisdiction.

As just described, the EPA believes it would be reasonable for states to follow a sequential two-step process to establish standards of performance. However, a state may develop its own process for calculating standards of performance outside of this two-step process, such as a hybridized approach which blends the two sequential steps into one combined step, so long as the state plan submission demonstrates application of the BSER in determining each standard of performance, (*i.e.,* evaluation of applicability of each and all candidate technologies to each designated facility). For example, if a state determines that the designated facility is able to implement only four of the six candidate technologies (due to the remaining useful life or other factors), the state is required to demonstrate in its plan submission that it in fact considered the two remaining candidate technologies in making this determination.

For the two-step approach, a state could do this by explaining in its plan submission that it considered the application of each of the candidate technologies in the first instance, but in the second step the state determined that the two candidate technologies should not be part of the methodology to calculate the EGU's standard of performance because of remaining useful life or other factors. The state should additionally provide a rationale for why and how it considered remaining useful life and other factors to discount a particular candidate technology from the calculation of a standard of performance (*e.g.,* by explaining that such technology has already been implemented by a particular source).

For a hybridized approach, when the state is applying the BSER and determining the emission reductions associated with the candidate technologies for a specific designated facility, it may be readily apparent that two of the candidate technologies are not reasonable to install because, for example, those technologies have recently been updated at the unit, independent of this final rule. This hybridized approach, which blends application of the BSER and associated stringency with consideration of remaining useful life and other factors in one step to calculate a standard of performance, may be appropriate provided that the state plan clearly demonstrates the standard of performance (expressed as a degree of emission limitation) that would result from application of the BSER and provides a rationale for why and how remaining useful life and other factors were considered to discount a particular candidate technology from the calculation of a standard of performance. This is one illustrative way in which states can demonstrate, in establishing a standard of performance, that they have both fulfilled their obligation to apply the degree of emission limitation achievable through the BSER to each designated facility and also properly invoked their discretion in considering remaining useful life and other factors.

In this section of the preamble, the EPA addresses discrete aspects of the standard-setting process. It is intended to provide states clarity and direction on each of these aspects to assist the states in developing standards of performance. The EPA is not requiring a specific method for states to develop standards of performance.

a. Application of the BSER

As described in other parts of this section, while the EPA's role is to determine the BSER, CAA section 111(d)(1) squarely places the responsibility of establishing a standard of performance for an existing designated facility on the state as part of developing a state plan. This final rule requires states to evaluate the applicability of each of the candidate technologies (HRI measures) that the EPA has determined constitute the BSER in establishing a standard of performance for each designated facility within their jurisdiction. The BSER is a list of candidate technologies that are HRI measures, which states will evaluate and apply to existing sources, establishing a standard of performance that is appropriately tailored to each existing source.[226] In establishing a standard of performance, a state may consider remaining useful life and other factors as appropriate based upon the specific characteristics of those units. In general, the EPA envisions that the states would set standards based on considerations most appropriate to individual sources or groups of sources (*e.g.,* subcategories). These may include consideration of historical emission rates, effect of potential HRIs (informed by the information in the EPA's candidate technologies described earlier in section III.E), or changes in operation of the units, among other factors the state believes are relevant. As such, states have considerable flexibility in determining standards of performance for units, as contemplated by the express statutory text.

States have discretion to apply the same standard of performance to groups of existing sources within their jurisdiction, as long as they provide a sufficient explanation for this choice and a demonstration that this approach will result in standards of performance achievable at the sources. But states also

[226] Because the candidate technologies that comprise the BSER can, at least in some cases, be applied in combination at an individual source, states should evaluate both individual candidate technologies and combinations of candidate technologies to appropriately establish standards of performance.

have discretion, expressly conferred on them by Congress in CAA section 111(d), to take into account a source's remaining useful life and other factors when establishing a standard of performance of that source, and much of the discussion in this final rule relates to the nature of that discretion and the factors that should influence states' exercise of it. As the EPA described in the proposal and as commenters have verified, the fleet of coal-fired EGUs is diverse and each EGU has been designed and engineered uniquely to fit the need at the time of construction. Because each coal-fired steam boiler subject to this rule has been designed, maintained, utilized, and upgraded uniquely, each designated facility has a unique set of circumstances with a set of source-specific factors governing its use. The outgrowth of the abundance of source-specific factors has led the EPA to determine that a tailored standard of performance (developed by states) that considers those factors can achieve emission reductions in the fleet without making broad assumptions about the fleet that may not be applicable to a particular unit. The source-specific circumstances at each EGU causes considerable variation in average emission rates across the fleet. If a single standard of performance (*i.e.,* a single degree of emission limitation resulting from a particular technology or fixed set of technologies) were to be applied to the entire fleet, the result could be either that a large portion of the fleet would not be required to achieve any meaningful emission reductions, or a large portion of the fleet would face overly stringent requirements. The goal of these emission guidelines is not to burden or shut down coal-fired EGUs—which could compromise the stability of the power sector and thus energy reliability to consumers, concerns which the EPA expresses, informed by, among other factors, Congress's direction to take into account energy requirements in determining BSER—as coal-fired EGUs still have considerable viability as part of the power sector.

When states apply the BSER's candidate technologies to a designated facility, the application of each technology and the associated degree of emission limitation achievable by such application will entail source-specific determinations. For this reason, in Table 1, the EPA provided the degree of emission limitation achievable through application of the BSER in the form of ranges, which capture the reductions and costs that the EPA expects to approximate the outcome of the application. The degree of emission limitation achievable through application of the BSER (*i.e.,* the ranges of improvements in Table 1) should be used by the states in establishing a standard of performance; however, the standard of performance calculated for a specific designated facility may ultimately reflect a degree of emission limitation achievable through application of the BSER outside of the EPA's ranges because of consideration of source-specific factors. If a state uses the sequential two-step process to establish a standard of performance, in the first step the EPA expects that the state will use the range of improvements for each candidate technology (and combinations thereof where technically feasible) to develop a standard of performance for a designated facility (the range of costs can be used in the second step which considers the remaining useful life and other factors as discussed in section III.F.1.b.). The ranges of HRI in section III.E are typical of an EGU operating under normal conditions. While a source with typical operating conditions (assuming no consideration of remaining useful life or other factors) will have a standard of performance with an expected improvement in performance within the ranges in Table 1, there may be source-specific conditions that cause the actual HRI of the applied candidate technology to fall outside the range. For example, if a designated facility had installed a new boiler feed pump just prior to a state's evaluation of the designated facility, the application of that candidate technology would yield negligible improvement in the heat rate and thus the value would fall outside the ranges provided by the EPA (*i.e.,* because the technology has already been applied and the baseline emission rate reflects that). As with the application of all the candidate technologies, the state plan submission must identify: (1) The value of HRI (*i.e.,* the degree of emission limitation achievable through application of the BSER) for the standard of performance established for each designated facility; (2) the calculation/methodology used to derive such value; and (3) any relevant explanation of the calculation that can help the EPA to assess the plan. In explaining the value of HRI that has been calculated, if the value of the HRI falls within the range identified by the EPA for a particular candidate technology, a state may note as such as part of its explanation. If a resulting value of HRI falls outside the range provided by the EPA, the state should in its state plan submission explain why this is the case based on application of the candidate technology to a particular source. In any instance, the state plan submission must identify the value of HRI that has been calculated and the calculation used to derive the value of HRI, and explain both. The states will thus use the information provided by the EPA, but will be expected to conduct source-specific evaluations of HRI potential, technical feasibility, and applicability for each of the BSER candidate technologies. After a state applies the candidate technologies to a designated facility (*i.e.,* step one), it can consider the remaining useful life and other factors associated with the source and determine whether it is cost-reasonable to actually implement that technology at the source (*i.e.,* step two). This is described in detail below in section III.F.1.b.

The approach to require states to tailor standards of performance for designated facilities is both consistent with the framework of cooperative-federalism envisioned under CAA section 111(d), and the new implementing regulations for CAA section 111(d).[227] The new implementing regulations at40 CFR 60.21a(e) and 60.22a(b)(2) and (4) require emission guidelines to reflect, and contain information on, the degree of emission limitation achievable through the application of the BSER. By providing the BSER and the associated level of stringency in the form of HRIs and associated range of heat rate improvements, the EPA is thus meeting applicable statutory and regulatory requirements and is giving states the necessary information and direction to establish standards of performance for existing sources that reflect the degree of emission limitation achievable through application of the BSER.[228]

(1) Variable Emission Performance

The Agency received comments that there is considerable variation in emissions between designated facilities within the industry, as well as considerable variation of emissions for individual units based on the operating conditions. Commenters expressed concern that the degree of emission limitation achievable through the application of the BSER is similar to the

[227] *See* 83 FR 44746.

[228] By providing the BSER and level of stringency associated with the BSER, ACE meets the applicable requirements of the new implementing regulations at 40 CFR part 60, subpart Ba, regarding the contents of an emission guideline. An ''emission guideline'' is defined under 40 CFR 60.21a(e) as a ''final guideline document'' which must contain certain items enumerated under 40 CFR 60.22a. The preamble, regulatory text, and record for ACE comprise the ''final guideline document'' referenced as the emission guideline.

magnitude in the variation in the emission rate at a specific EGU due to different operating conditions (*e.g.,* the operating load of the EGU). Commenters contend that because of this similarity, a designated facility could fall out of compliance with its standard of performance if its operating conditions change despite the source's having installed/applied all of the candidate technologies.

Commenters further stated that oftentimes the operation of a designated facility is not in the control of the owner/operator when it goes to load and cycling, and because of that the emission rate varies based on circumstances that are outside of the designated facility's control. The commenters further state that they should not be held accountable to standards that are not reflective of this lack of control and variability. The EPA acknowledges commenters' concerns about variability among designated facilities and variability of emission performance at an individual designated facility, and believes the flexibilities provided for states in establishing standards of performance, as described in this section, are sufficient to accommodate these variables. In establishing standards of performance, states can consider the two distinct types of variable emission performance [229] (*i.e.,* variation between different facilities and variation of emissions at one facility at different times) and states can tailor standards of performance accordingly.

First, standards of performance should acknowledge and reflect variability across EGUs due to unit-specific characteristics and factors, including, but not limited to, boiler-type, size, *etc.* By allowing states to establish standards of performance for individual designated facilities (in accordance with the statute's text and structure which provides that states in their plans shall establish standards of performance for existing sources), the EPA expects that standards of performance will inherently account for unit-specific characteristics.[230] By applying the BSER to individual designated facilities within the state, standards of performance would account for unit-specific characteristics such as unit design, historical operation and maintenance. As further described in section III.F.1.b, states may also account for anticipated future design and/or operating plans—such as plans to operate as baseload or load following electricity generators.

Second, standards of performance should reflect variability in emission performance at an individual designated facility due to changes in operating conditions. Specifically, the agency believes it would be appropriate for states to identify key factors that influence unit-level emission performance (*e.g.,* load, maintenance schedules, and weather) and to establish emission standards that vary in accordance with those factors. In other words, states could establish standards of performance for an individual EGU that vary (*i.e.,* differ) as factors underlying emission performance vary. For example, states could identify load segments (ranges of EGU load operation) that reflect consistent emission performance within the segment and varying emission performance between segments. States could then establish standards of performance for an EGU that differ by load segment.

Another possible option to account for variable emissions is to set standards of performance based on a standard set of conditions. A state could establish a baseline of performance of a unit at specific load and operational conditions and then set a standard against those conditions via the application of the BSER. Compliance for the unit could be demonstrated annually (or by another increment of time if appropriate based on the level of stringency of the standard of performance set for the unit) at those same conditions. In the interim, between the demonstration of compliance under standardized conditions, a state could allow for the maintenance and demonstration of fully operational candidate technologies to be a method to demonstrate compliance as the standard of performance must apply at all times.

The Agency believes that these approaches to providing flexibility (and possible others not described here) in establishing standards of performance are reasonable and appropriate by accounting for innate variable emission performance across EGUs and at specific EGUs while also limiting this flexibility to instances in which underlying variable factors are evaluated and linked to variable emission performance.

(2) Compliance Timelines

Additionally, the new implementing regulations require that emission guidelines identify information such as a timeline for compliance with standards of performance that reflect the application of the BSER.[231] However, given the source-specific nature of these emission guidelines and the reasonably anticipated variation between standards established for sources within a state, the EPA believes it more appropriate that a state establish tailored compliance deadlines for its sources based on the standard ultimately determined for each source. Accordingly, the EPA is superseding this aspect of 40 CFR 60.22a for purposes of ACE, as allowed under the applicability provision in the new implementing regulations under 60.20a and allowing for states to include an appropriate compliance deadline for each designated facility based on its standard of performance determined as part of the state plan process. It is important that states consider compliance timelines that are consistent with the application of the BSER to ensure that the compliance timeline does not undermine the BSER determination made by the EPA. For most states, the EPA anticipates initial compliance to be achieved by sources within twenty-four months of the state plan submittal. If a state chooses to include a compliance schedule (because of source-specific factors) for a source that extends more than twenty-four months from the submittal of the state plan, the plan must also include legally enforceable increments of progress for that source [232]). The EPA does not envision that most states will be using increments of progress leading up to initial compliance. However, as with the consideration of other source-specific factors, where a state does choose to provide for a source to comply on a longer timeframe than twenty-four months and to employ legally enforceable increments of progress

[229] In this context, variable emission performance is a result of underlying variability in heat rate, as emissions of CO_2 from EGUs are proportional to the unit's heat rate performance.

[230] Note that for administrative efficiency in developing a state plan, a state may be able to calculate a uniform standard of performance that reflects application of the BSER for a group of designated facilities rather than performing the same calculation multiple times for multiple individual sources if the group of sources has similar characteristics such that application of BSER would be consistent between the EGUs. This final rule does not necessarily require a state to provide a discrete calculation and separate standard of performance for each designated facility within a group of similar designated facilities, but if a state chooses to calculate a uniform rate for such a group of sources the plan submission should explain how the uniform rate reflects application of the BSER for all of the units in the group (*e.g.,* because of similar operating characteristics). Additionally, even if the same emission rate is calculated for designated facilities at different facilities that are included in such a group, such standard is applicable to each individual designated facility, and each source would be required to meet that standard by implementing ACE requirements separately, consistent with the state plan requirements described in section III.F.2 of this rule.

[231] *See* 40 CFR 60.22a.

[232] *See* 40 CFR 60.24a(d).

along the way, the state should include in its state plan submission to the EPA an adequate justification for why that approach is warranted. The level of stringency can be compromised if a compliance schedule does not adequately reflect the BSER determination.

Several commenters requested clarity on when standards of performance must become effective (*i.e.,* when must designated facilities comply with their standards of performance) once a state plan has been submitted but not yet approved by the EPA. The contents of a state plan submission, such as standards of performance and related requirements, are not effective or enforceable under federal law until they are approved by the EPA. However, state plan requirements must be fully adopted as a matter of state law, or issued as a permit, order, or consent agreement, before the plan is submitted to the EPA (and therefore could be enforceable as a matter of state law, depending on when the state has chosen to make such requirements effective).[233] The EPA anticipates that in determining an appropriate compliance schedule (and more specifically the initial compliance) for designated facilities, a state will consider the anticipated timing of review of the state's plan by the EPA and what sources may need to do in the interim in order to assure ultimate compliance with their standards of performance while EPA is in the process of reviewing the plan.

States also have discretion in establishing a compliance schedule for designated facilities, but the Agency urges states to use caution as to not undermine the BSER by the determined schedules. Most programs under CAA section 111 do not have compliance timelines greater than a year and the Agency believes that is a good indicator for states to take into consideration determining compliances schedules. Much of how a compliance schedule is structured can be based on how the standard of performance is structured. In section III.F.1.a.(1) there is a discussion about how a state might account for variable emissions. One of the options is to set a standard of performance under standardized conditions to take into account many of the factors that can lead to variable emissions from a designated facility. The standardized conditions (*e.g.,* load, ambient temperature, humidity *etc.*) that apply to the standard of performance must also be met when there is a compliance demonstration. Because these standardized conditions are not maintained throughout a compliance period, the segmented nature of demonstrating compliance could mirror the compliance schedule. For example, a designated facility could have a monthly demonstration under standardized conditions that mirrors a monthly compliance schedule. This is one example to illustrate how a standard of performance can align with a compliance schedule.

Another consideration for states in establishing standards of performance is the emission averaging time (*e.g.,* the amount of time that a designated facility may average its emission rate). As described above in section III.F.1.a.(1), EGUs may have considerably variable emissions due to numerous operating factors. A method to account for seasonal variability is to average a designated facility's emission rate over the course of multiple seasons.

b. Consideration of Remaining Useful Life and Other Factors

CAA section 111(d) requires, in part, that the EPA ''shall permit the State in applying a standard of performance to any particular source under a plan submitted under [CAA section 111(d)] to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.'' Consistent with the requirements of this provision, the EPA is permitting states to consider remaining useful life and other factors in establishing a standard of performance for a particular source in this final rule. States may do this in several ways. If a state is following the sequential two-step process, the state would first apply all of the candidate technologies to a designated facility to derive a standard of performance with consideration to the EGU's historical or projected performance, as previously described in section III.F.1.a. In the second step of this process, the state would consider the ''remaining useful life and other factors'' for the EGU and develop a standard of performance accordingly. It should be noted that the consideration of remaining useful life and other factors is a discretionary step for states. If a state were to establish a standard of performance for a designated facility based solely on the application of the BSER, it would be reasonable to do so and not precluded under the statute.

The CAA explicitly provided under CAA section 111(d)(1) that states could, under appropriate circumstances, establish standards of performance that are less stringent than the standard that would result from a direct application of the BSER identified by the EPA. CAA section 111(d)(1) achieves this goal by authorizing a state, in applying a standard of performance, to take into account a source's remaining useful life and other source-specific factors. As such, the EPA is promulgating, as part of the new implementing regulations at 40 CFR 60.20a-29a, a provision to permit states to take into account remaining useful life, among other factors, in establishing a standard of performance for a particular designated facility, consistent with CAA section 111(d)(1)(B). The new implementing regulations (also consistent with the previous implementing regulations) give meaning to CAA section 111(d)(1)(B)'s reference to ''other factors'' by identifying the following as a nonexclusive list of several factors states may consider in establishing a standard of performances:

- Unreasonable cost of control resulting from plant age, location, or basic process design;
- Physical impossibility of installing necessary control equipment; or
- Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

Given that there are unique attributes and aspects of each designated facility, there are important factors that influence decisions to invest in technologies to meet a potential standard of performance. These include factors not enumerated in the list provided above, including timing considerations like expected life of the source, payback period for investments, the timing of regulatory requirements, and other source-specific criteria. The state may find that there are space or other physical barriers to implementing certain HRIs at specific units. Alternatively, the state may find that some HRI options are either not applicable or have already been implemented at certain units. The EPA understands that many of these ''other factors'' that can affect the application of the BSER candidate technologies distill down to a consideration of cost. Applying a specific candidate technology at a designated facility can be a unit-by-unit determination that weighs the value of both the cost of installation and the CO_2 reductions.

The EPA received comment on the ACE proposal that the EPA should provide more information and guidance for what could be considered ''other factors'' in addition to the considerations of the remaining useful life. In addition, commenters also requested more information on the remaining useful life and other source-

[233] 40 CFR 60.23a, 60.27a(g)(2)(iii).

specific factors that could be considered in developing a standard of performance. The EPA acknowledges that there are a host of things that could be considered ''other factors'' by states that can be used to develop a standard of performance. While the EPA cannot identify every set of circumstances and factors that a state could consider, the EPA agrees with the commenters that it would be helpful for states if the EPA were to provide a non-exhaustive set of qualitative examples that states could consider in developing standards of performance as described below. The EPA will evaluate each standard of performance and the factors that were considered in the development of the standard of performance on a case by case basis. The state should include all of the factors and how the factors were applied for each standard of performance in the state plan. The EPA received many notable comments that states would like more direction and assistance in developing standards of performance. The examples are intended to help provide this assistance, but the EPA also understands that, because there are so many considerations for each source, states might have further questions while developing plans. States are encouraged to reach out to the Agency during the development of plans for further assistance.

As noted above, the consideration of the remaining useful life and other factors most often is a reflection of cost. When the EPA determines the BSER for a source category, the EPA typically considers factors such as cost relative to assumptions about a typical unit. Because the costs evaluated for the BSER determination are relative to a typical unit, the source-specific conditions of any particular existing designated facility that a state will evaluate in developing its plan under CAA section 111(d) are not inherently considered. A state's consideration of the remaining useful life and other factors will reflect the costs associated with the source-specific conditions. As part of the BSER determination, the EPA has provided a range of costs associated with each candidate technology (*see* Table 1). These costs are provided to serve as an indicator for states to determine whether it is cost-reasonable for the candidate technology to be installed. These cost ranges are certainly not intended to be presumptive (*i.e.,* the ranges are not an accurate representation for each designated facility and should not be used without a justified analysis by the state), but rather are provided as guide-posts to states. If a state considers the remaining useful life and/or other factors in determining a standard of performance, the state is required to describe, justify, and quantify how the considerations were made in its plan. Because these considerations are discretionary and source-specific, the burden is on the state in its plan to demonstrate and justify how they were taken into account.

A state might consider the remaining useful life of a designated facility with a retirement date in the near future by a number of ways in the standard setting process. One way that a state may take into account this circumstance is in applying the BSER (either through the sequential, two-step process or through some other method that reflects application of the BSER), establish a standard that ultimately only applies the less costly BSER technologies in the development of the standard of performance that the state establishes for the particular designated facility. The shorter life of the designated facility will generally increase the cost of control because the time to amortize capital costs is less. Another outcome of a state's evaluation of a designated facility's remaining useful life may lead to the state setting a ''business as usual'' standard. This could be an appropriate outcome where the remaining useful life of the designated facility is so short that imposing any costs on the EGU is unreasonable. Because a state plan must establish standards of performance for ''any'' designated facility under CAA section 111(d), the standard applied to this designated facility would reflect ''business as usual'' and require the unit to perform at its current level of efficiency during the remainder of its useful life. Under all of these examples and under any other circumstance in which a state considers remaining useful life or other factors in establishing a standard of performance, the state must describe in its state plan submission such consideration and ensure it has established a standard for every designated facility within the state, even one with an anticipated near-term retirement date.

Another consideration for a state in setting standards of performance with consideration to the remaining useful life and other factors is how the different candidate technologies interact with one another and how they interact with the current system at a designated facility. Commenters have expressed, and the EPA agrees, that the application of efficiency upgrades at EGUs are not necessarily additive. Installing HRI technologies in parallel with one another may mitigate the effects of one or more of the technologies. While states must apply the BSER and the degree of emission limitation achievable through such application in calculating a standard of performance, states may also consider the mitigating effects on the emission reductions that would result from the installation of a particular candidate technology, and may as a result of this consideration determine that installing that particular candidate technology at a particular source is not reasonable. This consideration is authorized as one of the ''other factors'' that states may consider in establishing a standard of performance under CAA section 111(d)(1) and the new implementing regulations under 40 CFR 60.24a(e).

A prime example of an ''other factor'' is ruling out the reapplication of a candidate technology. The EPA anticipates this to be a part of many state plans. In this scenario, a designated facility recently applied one of the candidate technologies prior to the time ACE becomes applicable. To require that designated facility to update that candidate technology again, as a result of ACE, would not be reasonable because the costs will be significant with marginal, if any, heat rate improvement.

As described in section III.F.1.c., states are obligated to set rate-based standards of performance. These will generally be in the form of the mass of carbon dioxide emitted per unit of energy (for example pounds of CO_2 per megawatt-hour or lb/MWh). The emission rate can be expressed as either a *net* output-based standard or as a *gross* output-based standard, and states have the discretion to set standards of performance in either form. The difference between net and gross generation is the electricity used at a plant to operate auxiliary equipment such as fans, pumps, motors, and pollution control devices. The gross generation is the total energy produced, while the net generation is the total energy produced minus the energy needed to operate the auxiliary equipment.

Most of the candidate technologies, when applied, affect the gross generation efficiency. However, some candidate technologies, namely improved or new variable frequency drives and improved or new boiler feed pumps, improve the net generation by reducing the auxiliary power requirement. Because improvements in the efficiency of these devices represent opportunities to reduce carbon intensity at existing affected EGUs that would not be captured in measurements of emissions per gross MWh, states may

want to consider standards expressed in terms of net generation. If a state chooses to set standards in the form of *gross* energy output, it will be up to the state to determine and demonstrate how to account for emission reductions that are achieved through measures that only affect the *net* energy output.

One of the more significant changes between the ACE proposal and this action is that the EPA is not finalizing the NSR reforms that it proposed in the same document that it proposed ACE. While the EPA intends to take final action on the NSR reform at a later time in a separate action, the consequences of that action are no longer considered in parallel with ACE. Two of the candidate technologies, blade path upgrades and a redesigned/replaced economizer, were proposed as part of the BSER considering that NSR would not be a barrier for installation. Under ACE as finalized without parallel NSR reforms, the EPA anticipates that states may take into account costs associated with NSR as a source-specific factor in considering whether these two technologies are reasonable. While the EPA believes that states are more likely to determine that blade path upgrades and redesigned/replaced economizers are not as reasonable as anticipated at proposal when these were proposed as elements of BSER alongside proposed NSR reforms, as discussed above, the EPA is still finalizing a determination that these candidate technologies are elements of the BSER because it still expects these technologies to be generally applicable across the fleet of existing EGUs, and because the costs of the technologies themselves are generally economical and reasonable. In any case, under ACE as finalized, states are required to evaluate the applicability of all candidate technologies (*i.e.,* the BSER) to a particular existing source when establishing a standard of performance for that source.

c. Forms of Standards of Performance

While the EPA is allowing broad flexibility for states in establishing standards of performance for designated facilities, the EPA is finalizing a requirement that all standards of performance be in the form of an allowable emission rate (*i.e.,* rate-based standard in, for example, lb CO_2/MWh-gross). As described in the proposal an allowable emission rate is the form that corresponds to the EPA's BSER determination for these emission guidelines. When HRIs are made at an EGU, by definition, the CO_2 emission rate will decrease as described above in section III.E. There is a natural correlation between the BSER and an allowable emission rate as the standard of performance in this action. Also, by the Agency prescribing that only a singular form of standard (*i.e.,* an allowable emission rate) is acceptable, it will promote continuity among states and power companies, prevent ambiguity, and promote simplicity and ease of administration and avoid undue burden on the states and regulated parties.

The EPA received considerable comment that it should allow mass-based standards of performance. While the EPA understands the appeal of a mass-based standard for some stakeholders, this form of standard is not compatible with the EPA's BSER determination. In fact, the EPA believes that a mass-based standard would undermine the EPA's BSER. If designated facilities were to have mass-based standards, it is likely that many would meet their compliance obligation by reduced utilization. A standard of performance that incentivizes reduced utilization and possibly retirements does not reflect application of the BSER. See section II.B above for a discussion of reduced utilization and CAA section 111.

Additionally, given that the EPA has the obligation under CAA section 111(d)(2) to determine whether state plans are ''satisfactory,'' certain programmatic bounds are appropriate to facilitate the state's submission of, and EPA's review of, the approvability of state plans. Having a uniform type of standard of performance will help streamline the states' development of their plans, as well as the EPA's review of those plans as there will be fewer variables to consider in the development of each standard of performance. While the Agency has experience implementing mass-based programs, the uncertainty associated with projecting a level of generation for designated facilities is unnecessary when there is a more compatible format, *i.e.,* a rate-based standard.

The EPA also notes that it is not establishing a preference or requirement for whether a rate-based standard of performance be based in gross or net heat rate. The EPA acknowledges that there are ramifications of applying the BSER to establish a standard of performance with the consideration of type of heat rate used. This may be particularly important when considering the effects of part load operations (*i.e.,* net heat rate would include inefficiencies of the air quality control system at a part load whereas gross heat rate would not). This will also be important in recognizing the improved efficiency obtained from upgrades to equipment that reduce the auxiliary power demand. The consideration of this factor is left to the discretion of the state.

2. Compliance Mechanisms

Just as states have broad flexibility and discretion in setting standards of performance for designated facilities, sources have flexibility in how they comply with those standards. To the extent that a state develops a standard of performance based on the application of the BSER for a designated facility within its jurisdiction, sources should be free to meet that standard of performance using either BSER technologies or certain non-BSER technologies or strategies. Thus, a designated facility may have broad discretion in meeting its standard of performance within the requirements of a state's plan. For example, there are technologies, methods, and/or fuels that can be adopted at the designated facility to allow the source to comply with its standard of performance that were not determined to be the BSER, but which may be applicable and prudent for specific units to use to meet their compliance obligations. Examples of non-BSER technologies and fuels include HRI technologies that were not included as candidate technologies, CCS, and natural gas co-firing. In keeping with past programs that regulated designated facilities using a standard of performance, the EPA takes no position regarding whether there may be other methods or approaches to meeting such a standard, since there are likely various approaches to meeting the standard of performance that the EPA is either unable to include as part of the BSER, or is unable to predict. The EPA is, however, excluding some measures from use as compliance measures: averaging and trading and bio-mass cofiring. These measures do not meet the criteria for compliance measures. Those criteria, which are designed to assure that compliance measures actually reduce the source's emission rate, are two-fold: (1) The compliance measures must be capable of being applied to and at the source, and (2) they must be measurable at the source using data, emissions monitoring equipment or other methods to demonstrate compliance, such that they can be easily monitored, reported, and verified at a unit.

With respect to the first criterion, the EPA believes that both legal and practical concerns weigh against the inclusion of measures that cannot qualify as a ''system of emission reduction.'' Allowing those measures would be inconsistent with the EPA's

interpretation of the BSER as limited to measures that apply at and to an individual source and reduce emissions from that source. Because state plans must establish standards of performance—which by definition [234] ''reflect[ ] . . . the application of the [BSER]''—implementation and enforcement of such standards should correspond with the approach used to set the standard in the first place. Applying an implementation approach that differs from standard-setting would result in asymmetrical regulation. Specifically, a state's implementation measures would result in a more or less stringent standard implemented at an EGU than could otherwise be derived from application of the BSER.

There are certainly methods that affected EGUs could use to meet compliance obligations that are not the BSER, but these methods still fit the two criteria: They can be applied to and at the source and can be measured at the source using data, emissions monitoring equipment or other methods to demonstrate compliance, such that they can be monitored, reported, and verified at a unit. Such examples include CCS and natural gas cofiring.

Commenters also requested that reduced utilization be an available compliance mechanism. While a designated facility reducing its utilization would certainly reduce its mass of CO_2 emissions, it would likely not lead to an improved emission rate. As noted above in section III.F.1., a state can certainly take into account a designated facility's projected decreased utilization in setting a standard of performance, but it cannot make it the means of meeting compliance obligations because the degree of emission limitation achievable through the application of the BSER must still be reflected in setting the standard of performance. See section II.B above for a discussion of reduced utilization under CAA section 111.[235]

a. Averaging and Trading

This section discusses the question of whether averaging and trading are permissible means for sources to comply with ACE. For a discussion of averaging EGU-emissions over a compliance period, see section III.F.1.a.(2). In the proposal, the EPA solicited comment on whether CAA section 111(d) authorizes states to include averaging or trading between existing sources in the plans they submit to meet the requirements of final emission guidelines.[236] Specifically, the EPA: (1) Proposed to allow states to incorporate, as part of their plan, emissions averaging among EGUs across a single plant; and (2) solicited comment on whether CAA section 111(d) should be read not to authorize states to include trading and averaging between sources.[237]

The EPA received numerous comments on the topic of averaging and trading for compliance with ACE. With respect to averaging across designated facilities that are located at the same plant—including, but not limited to, EGUs that are served by a common stack—some commenters disapproved of this flexibility while others supported the ability to implement ACE via averaging in state plans. On the topic of averaging and trading between designated facilities located at different plants, the Agency received mixed support and opposition. Some commenters suggested that the EPA's proposed prohibition on averaging and trading between designated facilities at different plants was necessary given the Agency's construction of the BSER as limited to systems that could be applied to and at the ''source'' itself. Other commenters suggested that averaging and trading for compliance with ACE is not precluded under CAA section 111(d). Commenters also suggested that the statutory cross-reference under CAA section 111(d)(1) to CAA section 110 suggests that trading could be used for implementation under ACE. Several commenters provided examples of prior CAA section 111(d) regulations in which the agency allowed trading for implementation (*e.g.,* CAMR).

In this final action, the EPA determines that: Neither (1) averaging across designated facilities located at a single plant; nor (2) averaging or trading between designated facilities located at different plants are permissible measures for a state to employ in establishing standards of performance for existing sources or for sources to employ to meet those standards. CAA section 111(d) authorizes states to establish standards of performance for ''any existing source,'' which the CAA defines as ''any stationary source other than a new source.'' [238] ''Stationary source,'' in turn, means ''any building, structure, facility, or installation which emits or may emit any air pollutant.'' [239] In the ACE proposal, the EPA explained that an EGU ''subject to regulation upon finalization of ACE is any fossil fuel-fired electric utility steam generating unit (*i.e.,* utility boilers) that is not an integrated gasification combined cycle (IGCC) unit (*i.e.,* utility boilers, but not IGCC units) that was in operation or had commenced construction as of [January 8, 2014],'' and ''serves a generator capable of selling greater than 25 MW to a utility power distribution system and has a base load rating greater than 260 GJ/h (250 MMBtu/h) heat input of fossil fuel (either alone or in combination with any other fuel).'' [240] The proposal then identified HRI measures as the BSER for such units.[241] This action finalizes the Agency's determination that HRI measures are the BSER for designated facilities. *See* sections III.C & III.E.

Although the D.C. Circuit has recognized that the EPA may have statutory authority under CAA section 111 to allow plant-wide emissions averaging,[242] the Agency's determination that individual EGUs are subject to regulation under ACE precludes the Agency from attempting to change the basic unit from an EGU to a combination of EGUs for purposes of ACE implementation.[243]

In *ASARCO,* the EPA promulgated regulations re-defining ''stationary source'' as ''any . . . *combination of* . . . facilities.'' [244] By treating a ''combination of facilities'' as a single source, the EPA intended to adopt a ''bubble concept,'' which would allow a facility to ''avoid complying with the applicable NSPS so long as emission decreases from other facilities within the same source cancel out the increases from the affected facility.'' [245] The Court concluded, however, that the Agency ''has no authority to rewrite the statute in this fashion.'' [246] In a subsequent case, the D.C. Circuit recognized that the EPA has ''broad discretion to define the statutory terms for 'source,' [*i.e.,* building, structure, facility or installation], so long as guided by a reasonable application of the statute.'' [247]

Following these two decisions, the EPA adopted a new regulation defining ''building, structure, facility, or installation'' for nonattainment-area

[234] *See* CAA section 111(a)(1)

[235] For a discussion of reduced utilization in other CAA contexts, please see ACE RTC Chapter 1, response to comment 76.

[236] *See* 83 FR 44767–768.

[237] *Id.*

[238] 42 U.S.C. 7411(a)(6).

[239] *Id.* at section 7411(a)(3).

[240] 83 FR 44754.

[241] *Id.* at 44755.

[242] *See U.S. Sugar* v. *EPA,* 830 F.3d 579, 627 n.18 (D.C. Cir. 2016) (pointing to the definition of ''stationary source'').

[243] *See, e.g., ASARCO* v. *EPA,* 578 F.2d 319, 327 (D.C. Cir. 1978).

[244] *Id.* at 326 (emphasis added).

[245] *Id.*

[246] *Id.* at 327.

[247] *Alabama Power Co.* v. *Costle,* 636 F.2d 323, 396 (D.C. Cir. 1979).

permitting under the NSR program as ''all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel.'' [248] That rulemaking lead to the Supreme Court's decision in *Chevron* v. *NRDC,* 467 U.S. 837 (1984). In *Chevron,* the Court recognized that ''it is certainly no affront to common English usage to take a reference to a major facility or a major source to connote an entire plant as opposed to its constituent parts.'' [249]

Here, the EPA does not need to determine whether it would have been reasonable to interpret ''building, structure, facility, or installation'' as an entire plant for purposes of CAA section 111 (thus, encompassing all EGUs located at a single plant). Because ACE identifies individual EGUs as the designated facility,[250] state plans cannot accommodate any ''bubbling'' of EGUs for compliance with these emission guidelines.

In addition, as proposed, the EPA is precluding averaging or trading between designated facilities located at different plants for the following reasons.

The EPA believes that averaging or trading across designated facilities (or between designated facilities and other power plants, *e.g.,* wind turbines) is inconsistent with CAA section 111 because those options would not necessarily require any emission reductions from designated facilities and may not actually reflect application of the BSER.[251] Because state plans must establish standards of performance—which by definition ''reflects . . . the application of the best system of *emission reduction*''—implementation and enforcement of such standards should be based on improving the emissions performance of sources to which a standard of performance applies. Additionally, averaging or trading would effectively allow a state to establish standards of performance that do not reflect application of the BSER. For example, under a trading program, a single source could potentially shut down or reduce utilization to such an extent that its reduced or eliminated operation generates adequate compliance instruments for a state's remaining sources to meet their standards of performance without any emission reductions from any other source. This compliance strategy would undermine the EPA's determination of the BSER in this rule, which the EPA has determined as heat rate improvements.

In light of these concerns, as proposed, the EPA concludes that neither averaging nor trading between EGUs at different plants can be used in state plans for ACE implementation. Regarding commenters' assertions that the statutory text of CAA section 111(d) does not preclude averaging or trading, the Agency finds that the statutory text of CAA section 111(d) does not require the EPA to allow averaging or trading as a measure for states in establishing existing-source standards of performance or allow for sources to adopt as a compliance measure, and the interpretation of the limits on the scope of BSER under CAA section 111(a)(1) set forth in section II above as a basis for the repeal of the CPP suggests that those measures are not permissible, as they are not applied to a source.

Regarding commenters' assertions that the cross-reference in CAA section 111(d) to CAA section 110 authorizes averaging or trading for implementation, the Agency disagrees. The cross-reference to CAA section 110 indicates that ''[t]he Administrator shall prescribe regulations which shall establish a *procedure similar to that provided by CAA section 110* of this title under which each State shall submit to the Administrator a plan . . . .'' (emphasis added). The Agency's interpretation of this cross-reference is that it focuses on the *procedure* under which states shall submit plans to the EPA. It does not imply anything affirmative or negative about implementation mechanisms available under CAA section 111(d). In the absence of definitive instruction under this CAA provision, the Agency uses its best judgment to conclude that the meaning and scope of the BSER in this rule preclude the use of averaging or trading for covered EGUs at different plants in state plans. Commenters also asserted that the EPA has promulgated regulations under CAA section 111(d) that included trading in the past, such as CAMR. As an initial matter, CAMR was vacated by the D.C. Circuit and never implemented. Nonetheless, the Agency notes that the CAMR included trading both in the establishment of the BSER and as an available implementation mechanism. In the ACE rule, by contrast, trading was not factored into the determination of the BSER and so should not be authorized for implementation.

Moreover, it is not clear that trading would qualify as a ''system of emission reduction'' that can be applied to and at an individual source and would lead to emission reductions from that source. Indeed, the nature of trading as a compliance mechanism is such that some sources would not need to apply any pollution control techniques at all in order to comply with a cap-and-trade scheme. A compliance mechanism under which multiple sources can comply not by any measures applied to those sources individually, but instead by obtaining credits generated by measures adopted at another source, is not consistent with the interpretation of the limits on the scope of BSER adopted in section II above. Accordingly, trading is not permissible under CAA section 111.

b. Biomass Co-Firing

The ACE proposal solicited comment on the inclusion of forest-derived and non-forest biomass as non-BSER compliance options for affected units to meet state plan standards. The proposal also solicited comment on what value to

[248] 46 FR 50766.

[249] 467 U.S. at 860.

[250] Fossil fuel-fired steam generators (*i.e.,* EGUs) were among the first source categories listed under CAA section 111. *See* 36 FR 5931. Since then, the Agency has promulgated multiple rulemakings specifically regulating EGUs. *See e.g.,* 40 CFR part 60, subparts D, Da, TTTT, and UUUU. In any case, the decision to identify EGUs as the regulated source is made under CAA section 111(b); that is because regulations under CAA section 111(d) are authorized for sources ''to which a standard of performance . . . would apply if such existing source were a new source.'' In this case, new source performance standards have been established for certain ''new, modified, and reconstructed'' EGUs. 80 FR 64510. While the EPA proposed to revisit several portions of those standards, *see* 83 FR 65424, the Agency did not propose to revise the applicability requirements for them, *id.* at 65429. Accordingly, individual EGUs continue to be the appropriate regulatory target for purposes of ACE (and not, for example, multiple EGUs that may be co-located at a single power plant).

[251] The EPA's interpretation of CAA section 111 on this point has changed since the promulgation of the since-vacated CAMR and does not necessarily extend to other CAA programs and provisions, which can be distinguishable based on the applicable statutory and regulatory requirements and programmatic circumstances. For example, the EPA has implemented several trading programs under the so-called Good Neighbor provision at CAA section 110(a)(2)(D)(i)(I). *See* Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone (also known as the NO_X SIP Call), 63 FR 57356 (October 27, 1998); Clean Air Interstate Rule (CAIR) Final Rule, 70 FR 25162 (May 12, 2005); Cross State Air Pollution Rule (CSAPR) Final Rule, 76 FR 48208 (August 8, 2011); CSAPR Update Final Rule, 81 FR 74504 (October 26, 2016). Section 110(a)(2)(A), which is applicable to the requirements of the Good Neighbor provision, explicitly authorizes the use of marketable permits and auctions of emission rights. Additionally, the Good Neighbor provision prohibits emissions activity in certain ''amounts'' with respect to the NAAQS. The affirmative requirement under this provision to reduce certain emissions means it is appropriate to implement measures which will result in the required emission reductions. The EPA has done so previously by implementing trading programs to reduce ozone and particulate matter, the regional-scale nature of which can be effectively regulated under a trading program.

attribute to biogenic CO_2 associated with non-forest biomass, if included. The EPA received a range of comments both supporting and opposing the use of forest-derived and non-forest biomass feedstocks for compliance under this rule. Additionally, the EPA received a range of comments regarding the valuation of CO_2 emissions from biomass combustion.

Numerous commenters supported the inclusion of biomass as a compliance measure. Some reiterated the EPA's 2018 policy statement regarding biogenic CO_2 emissions, which laid out the Agency's intent to treat biogenic CO_2 emissions from forest biomass from managed forests as carbon neutral in forthcoming Agency actions. Specifically, these commenters stated that the nature of biomass and its role in the natural carbon cycle (*i.e.,* carbon is sequestered during biomass growth that occurs offsite) makes biomass a carbon-neutral fuel, and therefore that biomass should be eligible as a compliance option under this rule. Commenters opposing the inclusion of biomass for compliance asserted that biomass combustion does not reduce stack GHGs emissions, as it emits more emissions per Btu than fossil fuels, and therefore should not be eligible for compliance. Some comments noted that the scientific rationale underlying the use of biomass as a potential GHG reduction measure at stationary sources relies primarily on terrestrial CO_2 sequestration occurring due to activities offsite (*i.e.,* activities outside of and largely not under the control of a designated facility).

The construct of this final ACE rule necessitates that measures taken to meet compliance obligations for a source actually reduce its emission rate in that: (1) They can be applied to the source itself; and (2) they are measurable at the source of emissions using data, emissions monitoring equipment or other methods to demonstrate compliance, such that they can be easily monitored, reported, and verified at a unit (see section III.F.2). While the firing of biomass occurs at a designated facility, biomass firing in and of itself does not reduce emissions of CO_2 emitted from that source. Specifically, when measuring stack emissions, biomass emits more CO_2 per Btu than fossil fuels, thereby increasing the CO_2 emission rate at the source. Accordingly, recognition of any potential CO_2 emissions reductions associated with biomass firing at a designated facility relies on accounting for activities not applied at and largely not under the control of that source (*i.e.,* activities outside of and largely unassociated with a designated facility), including consideration of terrestrial carbon effects during the biomass fuel growth. Therefore, biomass fuels do not meet the compliance obligations and are not eligible for compliance under this rule.

3. Submission of State Plans

CAA section 111(d)(1) provides that states shall submit to the EPA plans that establish standards of performance for existing sources within their jurisdiction and provide for implementation and enforcement of such standards. Under CAA section 111(d)(2), the EPA has the obligation to determine whether such plans are ''satisfactory.'' In light of the statutory text, state plans implementing ACE should include detailed information related to two key aspects of implementation: Establishing standards of performance for covered EGUs and providing measures that implement and enforce such standards.

Generally, the plans submitted by states must adequately document and demonstrate the process and underlying data used to establish standards of performance under ACE. Providing such documentation is required so that the EPA can adequately and appropriately review the plan to determine whether it is satisfactory; the EPA's authority to promulgate a federal plan is triggered in ''cases where the State fails to submit a satisfactory plan . . . .'' [252] For example, states must include data and documentation sufficient for the EPA to understand and replicate the state's calculations in applying BSER to establish standards of performance. Plans must also adequately document and demonstrate the methods employed to implement and enforce the standards of performance such that EPA can review and identify measures that assure transparent and verifiable implementation. Additionally, state plan submissions must, unless otherwise provided in a particular emissions guideline rule, adhere to the components of the new implementing regulations described in section IV. The following paragraphs discuss several components that states are required to include in their state plans as required under these final emission guidelines.

First, state plans must detail the approach or methods used by the state to apply the BSER and establish standards of performance. The state should include enough detail for the EPA to be able to reproduce the state's methods and calculations. The methodology submitted should clearly identify the approach by which states evaluate all of the HRIs finalized in this action, both alone and in combination with each other where technically feasible. To the extent that HRIs are not feasible to apply at a particular EGU, states must provide a rationale (and supporting data or metrics where relied upon) for why the calculation would be invalid or inappropriate.

Second, state plans must identify EGUs within their borders that meet the applicability requirements and are thereby considered a designated facility under ACE. Plans must also include emissions and operational data relied upon to apply BSER and determine standards of performance. These data must include, at a minimum, an inventory of CO_2 emissions data and EGU operational data (*e.g.,* heat input) for designated EGUs during the most recent calendar year for which data is available at the time of state plan development and/or submission. State plans must also include any future projections data relied upon to establish standards of performance, including future operational assumptions. To the extent that state plans consider an existing source's remaining useful life in establishing a standard of performance for that source, the state plan must specify the exact date by which the source's remaining useful life will be zero. In other words, the state must establish a standard of performance that specifies the designated facility will retire by a future date certain (*i.e.,* the date by which the EGU will no longer supply electricity to the grid). It is important to note that (as with all aspects of the state plan) the standard of performance and associated retirement date will be federally enforceable upon approval by the EPA. In the event a source's circumstances change so that this retirement date is no longer feasible, states generally have the authority and ability to revise their state plans. Such plan revisions must be adopted by the state and submitted to the EPA pursuant to the requirements of 40 CFR 60.28a.

Third, state plans should submit detailed documentation demonstrating in detail the application of the state's methodology to the state's data. In other words, states should include the calculations relied upon when applying the BSER to establish standards of performance. States should also include detailed documentation demonstrating the relied upon compliance mechanisms, consistent with section III.F.2.

Regarding establishing standards of performance and ensuring verifiable implementation for EGUs with complex

[252] CAA section 111(d)(2)(A).

stack configurations, states should include approaches (*e.g.,* formulas) that appropriately assign emissions and generation to individual EGUs. For example, if two EGUs share a common stack, the state should provide a methodology for disaggregating monitoring data to the individually covered EGUs. Another example for states to consider when appropriately assigning emissions and setting standards of performance is apportioning HRI that affect and improve the performance of multiple EGUs at a plant (*e.g.,* apportioning improvement credited to installed variable speed drives that affect multiple designated facilities at a plant).

As part of ensuring that regulatory obligations appropriately meet statutory requirements such as enforceability, the EPA has historically and consistently required that obligations placed on sources be quantifiable, permanent, verifiable, and enforceable. The EPA is similarly requiring that standards of performance placed on designated facilities as part of a state plan to implement ACE be quantifiable, permanent, verifiable, and enforceable. A state plan implementing ACE should include information adequate to support a determination by the EPA that the plan meets these goals.

Additionally, the EPA is finalizing a determination that states must include appropriate monitoring, reporting, and recordkeeping requirements to ensure that state plans adequately provide for the implementation and enforcement of standards of performance. Each state will have the flexibility to design a compliance monitoring program for assessing compliance with the standards of performance identified in the plan. To the extent that designated facilities or states already monitor and report relevant data to the EPA, states are encouraged to use these existing systems to efficiently monitor and report ACE compliance. For example, most potentially affected coal-fired EGUs already continuously monitor CO_2 emissions, heat input, and gross electric output and report hourly data to the EPA under 40 CFR part 75. Accordingly, if a state plan establishes a standard of performance for a unit's CO_2 emissions rate (*e.g.,* lb/MWh), states may use data collected by the EPA under 40 CFR part 75 to meet the required monitoring, reporting, and recordkeeping requirements under these emission guidelines.

The EPA is further generally applying the new implementing regulations for timing, process and required components for state plan submissions and implementation for state plans required for designated facilities. The new implementing regulations are described in detail in section IV. In section 40 CFR 60.5740a there is a complete description and list of what a state plan must include.

a. Electronic Submission of State Plans

The EPA will, in the near future, provide states with an electronic means of submitting plans. While the EPA proposed the use of the SPeCS software which has been used by the Agency for SIP submittals, the Agency is still developing the software to be used for ACE submittals. The EPA recommends that states submit state plans electronically as it will provide a more structured process and provide more timely feedback to the submitting state. The Agency also anticipates that many states will choose to submit plans electronically as states have a level of familiarity with EPA software, such as SPeCS. The EPA envisions the electronic submittal system as a user-friendly, web-based system that enables state air agencies to officially submit state plans and associated information electronically for review. Electronic submittal is the EPA's preferred method for receiving state plan submissions under ACE. However, if a state prefers to submit its state plan outside of this forthcoming system, the state must confer with its EPA Regional Office regarding additional guidance for submitting the plan to the EPA.

b. Approvability of State Plans That Are More Stringent Than Required Under ACE

One issue raised by several commenters is whether the EPA can approve, and thereby render federally enforceable, a state plan that contains requirements for an existing source within a state's jurisdiction that are more stringent than what is required under CAA section 111(d).[253] At proposal, the EPA acknowledged that CAA section 116 allows states to be more stringent than federal requirements as a matter of state law, but also noted that nothing in section 116 provides for such more-stringent requirements to become federally enforceable.[254] Some commenters assert that it is not within the EPA's authority under the CAA to approve such more-stringent requirements as part of the federally enforceable state plan, and the EPA should instead direct states to make such requirements exclusively a matter of state law and enforceability. Other commenters assert that the Supreme Court in *Union Electric Co.* v. *EPA,* 427 U.S. 246, (1976), precluded a reading of section 116 that would functionally require two separate sets of requirements, one at the stricter state level and one at the federally approved level.

In response to the commenters who contend the EPA does not have the authority to approve more stringent state plans, the EPA believes that these comments have merit. However, the EPA does not think it is appropriate at this point to predetermine the outcome of its action on a state plan submission in this regard without going through notice-and-comment rulemaking with regard to the approval or disapproval of that submission.[255]

[253] Requirements under state plans generally become federally enforceable once the EPA determines that they are ''satisfactory'' per section 111(d)(2). Section 113(a)(3) provides the EPA with the authority, in part, to enforce any requirement of any plan approved under the same subchapter as section 113; section 111(d) is within the same subchapter as section 113. Additionally, section 304(a)(1) grants citizens the authority to bring civil action against any person in violation of an ''emission standard'' under the CAA. Section 304(f)(1) and (3) respectively define ''emission standard'' as a standard of performance or any requirement under section 111 without regard to whether such requirement is expressed as an emission standard. Accordingly, citizens with standing could attempt to enforce the requirements of an EPA-approved section 111(d) state plan.

[254] 83 FR 44767 n.37.

[255] In the CPP, the EPA took the position that because ''the EPA's action on a 111(d)(1) state plan is structurally identical to the EPA's action on a SIP,'' the EPA is required to approve a state plan that is more stringent than the BSER because of CAA section 116 as interpreted by *Union Electric.* Legal Memorandum Accompanying Clean Power Plan for Certain Issues at 28–30; 80 FR 64840. For the reasons further described in this preamble, the EPA's position on this state plan stringency issue has evolved since the EPA addressed it in the CPP, and the Agency now identifies a potentially salient structural distinction between CAA sections 110 and 111(d). Notably, the BSER aspect of section 111(d) is absent from section 110, as SIP-measures required for attainment or maintenance of the NAAQS are not predicated on application of a specific technology. Under CAA section 109, the EPA establishes a health-protective standard, and CAA section 110 then gives states broad latitude on designing the contents of SIPs intended to meet that standard. By contrast, under CAA section 111, the EPA identifies a particular measure or set of measures, and CAA section 111(d) more narrowly prescribes that the contents of state plans include performance standards based on the application of such measures, and measures that provide for the implementation and enforcement of such standards. Given this key distinction between CAA sections 110 and 111(d), the EPA no longer takes the position it took in the CPP that these two statutory schemes are ''structurally identical'' and that therefore, under *Union Electric,* it must approve section 111(d) state plans that are more stringent on this basis. See *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502 (2009). However, for the reasons discussed in this preamble, the EPA is not at this stage prejudging the approvability of any future plan submission in this regard and will evaluate any plan submission, including one that is more stringent than what the BSER requires, on an individual basis through notice-and-comment rulemaking.

In response to the commenters who contend the EPA has the authority to approve more stringent state plans, as an initial matter, the EPA notes that the Court's decision in *Union Electric* on its face does not apply to state plans under CAA section 111(d). The decision specifically evaluated whether the EPA has the authority to approve a SIP under *section 110* that is more stringent than what is necessary to attain and maintain the NAAQS. The Court specifically looked to the requirements in CAA section 110(a)(2)(A) as part of its analysis, a provision that is wholly separate and distinct from CAA section 111(d). CAA section 110(a)(2)(A) requires SIPs to include any assortment of measures that may be necessary or appropriate to meet the ''applicable requirements'' of the CAA, which largely relate to the attainment and maintenance of the NAAQS. CAA section 111(d), by contrast, directs state plans to establish standards of performance for existing sources that reflect the degree of emission limitation achievable through the application of the BSER that EPA has determined is adequately demonstrated—and CAA section 111(d) expressly provides that it cannot be used to regulate NAAQS pollutants. Because the Court's holding was in the context of section 110 and not CAA section 111(d), the EPA believes that *Union Electric* does not control the question of whether CAA section 111(d) state plans may be more stringent than federal requirements.

Thus, *Union Electric* and the SIP issues that it addresses are distinguishable from the CAA section 111(d) context. States have broad discretion under section 110 to select the measures for inclusion in their SIPs to meet the NAAQS, which are health- or welfare-based standards not predicated on the application of any particular technology, whereas state plans under 111(d) must establish standards of performance, which are defined at CAA section 111(a)(1) as reflecting the degree of emission limitation achievable through application of the BSER at a source. However, the EPA is mindful that it does not prejudge the approvability of any state plan submission, but rather must determine whether it is ''satisfactory'' through undertaking notice-and-comment rulemaking.[256] Further, some issues of approvability are most appropriately handled through the submission, review, and approval or disapproval processes (with approvals and disapprovals then being subject to judicial review). The EPA anticipates that some states may wish to apply additional measures beyond those that the EPA has identified as BSER when setting the standard of performance, which states may believe are better suited to particular existing sources within their jurisdiction. The EPA notes, as stated above, that the comments suggesting that the EPA does not have the authority to approve a state plan that establishes standards of performance for existing sources more stringent than those that would result from an application of the BSER identified by the EPA have merit. However, the EPA believes that the question of whether it has the authority to approve, and thereby render federally enforceable, a state plan that establishes standards of performance that are more stringent than those that would result from the application of the BSER that the EPA has identified is addressed properly in the context of evaluating an individual state plan.

While the EPA does not prejudge the approvability of a state plan that establishes standards of performance for existing sources within the state's jurisdiction that are more stringent than those that would result from the application of the BSER that the EPA has identified, there are clear principles and limitations imposed by CAA section 111(d) that will apply to the EPA's review of *any* state plan. As a first principle, states must apply the BSER measures, as further described in section III.E. of the preamble, and derive a standard of performance that reflects the degree of emission limitation achievable through application of the candidate technologies, taking into account remaining useful life and other factors as appropriate.

As a second principle, whatever the scope of a state's authority under state law may be to design a scheme to meet the emissions guidelines, the EPA's authority to approve state plans that contain standards of performance for existing sources only extends to measures that are authorized statutorily. Specifically, the EPA's authority is constrained to approving measures that comport with the statutory interpretations, including interpretations of the limitations on ''standards of performance'' and the underlying BSER. For example, CAA section 111(d)(1) clearly contemplates that state plans may only contain requirements for existing sources, and not other entities. Therefore, in implementing the ACE rule, the EPA may not approve state plan requirements on entities other than existing EGUs, which are the designated facilities under this rule.[257] Another example that would exceed the EPA's authority is a state plan that includes standards of performance or implementation measures that do not result in emission reductions from an individual designated facility, such as the use of biomass or emissions trading, for the reasons discussed at section III.E.4.c. and III.F.2.a, respectively. Finally, the EPA does not have the authority to approve measures that purport to be standards of performance but that actually do not meet the statutory and regulatory terms for such standards. For example, under ACE, the EPA cannot approve a standard that is a requirement for a designated facility shut down. Such a standard is an operational standard rather than a standard of performance.[258] The EPA has not authorized the use of operational standards under CAA section 111(h) because the EPA has determined that it is feasible to prescribe a standard of performance for this source category and pollutant, expressed as an emission rate.[259]

As previously described, the EPA must review state plans, including plans that establish standards of performance for a particular existing source or sources that are more stringent than the standards that would result from application of the BSER, through notice-and-comment rulemaking to determine whether they are ''satisfactory''. This review includes ensuring that the state

[256] *See* CAA section 111(d)(2), 40 CFR 60.27a(b).

[257] Section 111(d) clearly identifies that the regulated entity under this provision is an existing source that would be of the same source category as a new source regulated under section 111(b), *i.e.,* a designated facility, as defined at 40 CFR 60.21(b). If the EPA were to approve a state plan that contained provisions regulating entities other than designated facilities, that approval would give the EPA (and citizen groups) federal enforcement authority over such entities. The EPA believes such a result would be contrary to statements by the U.S. Supreme Court that caution an agency against interpreting its statutory authority in a way that ''would bring about an enormous and transformative expansion in [its] regulatory authority without clear congressional authorization,'' *Utility Air Regulatory Group* v. *EPA,* 134 S. Ct. 2427, 2444 (2014).

[258] This example is distinguishable from the one described in section IV.H. where a state chooses to rely on a source's remaining useful life in establishing a less stringent standard of performance for that source than would otherwise result from an application of the BSER. In that instance, a state would include the shutdown date as a measure for implementation of a standard of performance, as required under section 111(d)(1)(B).

[259] The EPA also notes that for purposes of a federal plan, the EPA is limited to promulgating a standard of performance, which, as defined by section 111(a)(1) must reflect the degree of emission limitation achievable by the BSER; in promulgating a standard of performance under a federal plan, the statute directs the EPA to take into account, among other factors, remaining useful life of the source to which the standard applies. *See* section 111(d)(2).

plan submission does not contravene the statute by including measures that the EPA has no authority to approve or enforce as a matter of federal law, and that the state actually has evaluated the BSER in setting a standard. Though the EPA lacks the authority to approve certain measures, thereby rendering them federally enforceable, nothing precludes states from implementing or enforcing such requirements as a matter of state law.[260]

G. Impacts of the Affordable Clean Energy Rule

1. What are the air impacts?

In the RIA for this action, the Agency provides a full benefit-cost analysis of an illustrative policy scenario representing ACE, which models adoption of HRI measures at coal-fired EGUs. This illustrative policy scenario represents one set of potential outcomes of state determinations of standards of performance and compliance with those standards by affected coal-fired EGUs. Throughout the RIA, the illustrative policy scenario is compared against a single baseline that does not include the CPP. As described in Chapter 2 of the RIA, the EPA believes that a single baseline without the CPP represents a reasonable future against which to assess the potential impacts of the ACE rule. The EPA also provides analysis in Chapter 2 of the RIA that satisfies any need for regulatory impact analysis that may be required by statute or executive order for the repeal of the CPP.

The EPA has identified the BSER to be HRI. The EPA is providing states with a list of candidate HRI technologies that must be evaluated when establishing standards of performance. The cost, suitability, and potential improvement for any of these HRI technologies is dependent on a range of unit-specific factors such as the size, age, fuel use, and the operating and maintenance history of the unit. As such, the HRI potential can vary significantly from unit to unit. The EPA does not have sufficient information to assess HRI potential on a unit-by-unit basis. Therefore, any analysis of the final rule is illustrative. Nonetheless, the EPA believes that such illustrative analyses can provide important insights.

In the RIA, the EPA evaluated an illustrative policy scenario that assumes HRI potential and costs will differ based on unit size and efficiency. To establish categories and HRI potential for use in the RIA, the EPA developed a methodology that is explained in Chapter 1 of the RIA. Designated facilities were grouped into twelve groups based on three size categories and four efficiency categories. Cost and performance assumptions for the candidate technologies were applied to the groupings to establish representative and illustrative assumptions for use in the RIA. The EPA then assumed these varying levels of HRI potential and costs for the different groups in the power sector and emissions modeling as an illustration of the potential impacts.

The EPA evaluates the potential impacts of the illustrative policy scenario using the present value (PV) of costs, benefits, and net benefits, calculated for the years 2023–2037 from the perspective of 2016, using both a three percent and seven percent end-of-period discount rate. In addition, the EPA presents the assessment of costs, benefits, and net benefits for specific snapshot years, consistent with historic practice. These specific snapshot years are 2025, 2030, and 2035.

Overall, the impacts of the illustrative policy scenario in terms of change in emissions, compliance costs, and other energy-sector effects are small compared to the recent market-driven changes that have occurred in the power sector. These larger industry trends are discussed in detail in Chapter 2 of the RIA. In evaluating the significance of the illustrative policy scenario, as presented in the RIA and summarized here, it is important for context to understand that these impacts are modest and do not diverge dramatically from baseline expectations.

Emissions are projected to be lower under the illustrative policy scenario than under the baseline. Table 3 shows projected aggregate emission decreases for the illustrative policy scenario, relative to the baseline, for CO_2, SO_2 and NO_X from the electricity sector.

TABLE 3—PROJECTED CO_2, SO_2, AND NO_X ELECTRICITY SECTOR EMISSION IMPACTS FOR THE ILLUSTRATIVE POLICY SCENARIO, RELATIVE TO THE BASELINE

[2025, 2030, and 2035]

	CO_2 (million short tons)	SO_2 (thousand short tons)	NO_X (thousand short tons)
2025	(12)	(4.1)	(7.3)
2030	(11)	(5.7)	(7.1)
2035	(9.3)	(6.4)	(6.0)

Note: All estimates in this table are rounded to two significant figures.

The emissions changes in these tables do not account for changes in HAP that may occur as a result of this rule. For projected impacts on mercury emissions, please see Chapter 3 of the RIA. The EPA was unable to project impacts on other HAP emissions from the illustrative policy scenario due to methodology and resource limitations.

As noted earlier in this section, the illustrative policy scenario is compared against a baseline that does not include the CPP. This is because the ACE action only occurs after the repeal of the CPP. Chapter 2 of the RIA discusses the EPA's analysis of the CPP repeal. It explains how after reviewing the comments and fully considering a number of factors, the EPA ultimately concluded that the most likely result of implementation of the CPP would be no change in emissions and therefore no cost or changes in health benefits. This conclusion (*i.e.,* that repeal of the CPP has little or no effect against a baseline that includes the CPP) is appropriate for several reasons, consistent with OMB's guidance that the baseline for analysis ''should be the best assessment of the way the world would look absent the proposed action.'' [261] It is the EPA's consideration of the weight of the evidence, taking into account the totality of the available information, as presented in Chapter 2 of the RIA, that leads to the finding and conclusion that there is likely to be no difference between a world where the CPP is implemented and one where it is not. As further explained in Chapter 2 of the RIA, the EPA comes to this conclusion not through the use of a single analytical

[260] *See* CAA section 116; 40 CFR 60.24a(f).

[261] OMB circular A–4, at 15.

scenario or modeling alone, but rather through the weight of evidence that includes: Several IPM scenarios that explore a range of changes to assumptions about implementation of the CPP; consideration of the ongoing evolution and change of the electric sector; and recent commitments by many utilities that include long-term CO_2 reductions across the EGU fleet.

2. What are the energy impacts?

This final action has energy market implications. Overall, the analysis to support this action indicates that there are important power sector impacts that are worth noting, although they are small relative to recent market-driven changes in the sector or compared to some other EPA air regulatory actions for EGUs. The estimated impacts reflect the EPA's illustrative analysis of the final action. States are afforded considerable flexibility in the final action, and thus the impacts could be different to the extent states make different choices than those assumed in the illustrative analysis.

Table 4 presents a variety of energy market impacts for 2025, 2030, and 2035 for the illustrative policy scenario representing ACE, relative to the baseline.

TABLE 4—SUMMARY OF CERTAIN ENERGY MARKET IMPACTS FOR THE ILLUSTRATIVE POLICY SCENARIO, RELATIVE TO THE BASELINE

[Percent change]

	2025 (%)	2030 (%)	2035 (%)
Retail electricity prices	0.1	0.1	0.0
Average price of coal delivered to the power sector	0.1	0.0	(0.1)
Coal production for power sector use	(1.1)	(1.0)	(1.0)
Price of natural gas delivered to power sector	0.0	(0.1)	(0.6)
Price of average Henry Hub (spot)	0.0	0.0	(0.6)
Natural gas use for electricity generation	(0.4)	(0.3)	0.0

Energy market impacts are discussed more extensively in the RIA found in the rulemaking docket.

3. What are the compliance costs?

The power industry's ''compliance costs'' are represented in this analysis as the change in electric power generation costs between the baseline and illustrative policy scenario, including the cost of monitoring, reporting, and recordkeeping. In simple terms, these costs are an estimate of the increased power industry expenditures required to implement the HRI required by the final action.

The compliance assumptions—and, therefore, the projected compliance costs—set forth in this analysis are illustrative in nature and do not represent the plans that states may ultimately pursue. The illustrative policy scenario is designed to reflect, to the extent possible, the scope and nature of the final guidelines. However, there is considerable uncertainty with regards to the precise measures that states will adopt to meet the final requirements because there are considerable flexibilities afforded to the states in developing their state plans.

Table 5 presents the annualized compliance costs of the illustrative policy scenario.

TABLE 5—COMPLIANCE COSTS FOR THE ILLUSTRATIVE POLICY SCENARIO, RELATIVE TO THE BASELINE

[Millions of 2016$]

Year	Cost
2025	290
2030	280
2035	25

Note: Compliance costs equal the projected change in total power sector generating costs plus the costs of monitoring, reporting, and recordkeeping.

More detailed cost estimates are available in the RIA included in the rulemaking docket.

4. What are the economic and employment impacts?

Environmental regulation may affect groups of workers differently, as changes in abatement and other compliance activities cause labor and other resources to shift. An employment impact analysis describes the characteristics of groups of workers potentially affected by a regulation, as well as labor market conditions in affected occupations, industries, and geographic areas. Market and employment impacts of this final action are discussed more extensively in Chapter 5 of the RIA for this final action.

5. What are the benefits?

The EPA reports the estimated impact on climate benefits from changes in CO_2 and the estimated impact on health benefits attributable to changes in SO_2, NO_X, and $PM_{2.5}$ emissions, based on the illustrative policy scenario described previously. The EPA refers to the climate benefits as ''targeted pollutant benefits'' as they reflect the direct benefits of reducing CO_2, and to the ancillary health benefits derived from reductions in emissions other than CO_2 as ''co-benefits'' as they are not direct benefits from reducing the targeted pollutant. To estimate the climate benefits associated with changes in CO_2 emissions, the EPA applied a measure of the domestic social cost of carbon (SC–CO_2). The SC–CO_2 is a metric that estimates the monetary value of impacts associated with marginal changes in CO_2 emissions in a given year. The SC–CO_2 estimates used in the RIA for these rulemakings focus on the direct impacts of climate change that are anticipated to occur within U.S. borders.

The estimated health co-benefits are the monetized value of the human health benefits among populations exposed to changes in $PM_{2.5}$ and ozone. This rule is expected to alter the emissions of SO_2 and NO_X emissions, which will in turn affect the level of $PM_{2.5}$ and ozone in the atmosphere. Using photochemical modeling, the EPA predicted the change in the annual average $PM_{2.5}$ and summer season ozone across the U.S. for the years 2025, 2030, and 2035 for the illustrative policy scenario. The EPA next quantified the human health impacts and economic value of these changes in air quality using the environmental Benefits Mapping and Analysis Program—Community Edition (BENMAP–CE). The EPA quantified effects using concentration-response parameters

detailed in the RIA, which are consistent with those employed by the Agency in the PM NAAQS and Ozone NAAQS RIAs (U.S. EPA, 2012; 2015) (Table 6).

TABLE 6—ESTIMATED ECONOMIC VALUE OF AVOIDED $PM_{2.5}$ AND OZONE-ATTRIBUTABLE DEATHS AND ILLNESSES FOR THE ILLUSTRATIVE POLICY SCENARIO USING ALTERNATIVE APPROACHES TO REPRESENTING $PM_{2.5}$ EFFECTS

[95% Confidence interval in parentheses; millions of 2016$] [a]

	2025			2030			2035		
Ozone Benefits Summed With $PM_{2.5}$ Benefits									
3% Discount rate									
No-threshold model [b]	$390 ($37 to $1,100)	*to*	$970 ($86 to $2,800)	$490 ($47 to $1,300)	*to*	$1,200 ($110 to $3,500).	$550 ($52 to $1,500)	*to*	$1,400 ($120 to $3,900).
Limited to above LML [c]	$370 ($36 to $1,000)	*to*	$480 ($42 to $1,400)	$440 ($42 to $1,200)	*to*	$520 ($47 to $1,500)	$480 ($25 to $1,300)	*to*	$610 ($16 to $1,800).
Effects above NAAQS [d]	$76 ($8 to $210)	*to*	$250 ($23 to $760)	$75 ($8 to $210)	*to*	$260 ($23 to $770)	$90 ($10 to $250)	*to*	$320 ($28 to $930).
Ozone Benefits Summed With $PM_{2.5}$ Benefits									
7% Discount rate									
No-threshold model [b]	$360 ($34 to $990)	*to*	$900 ($80 to $2,600)	$460 ($44 to $1,200)	*to*	$1,100 ($100 to $3,200).	$510 ($48 to $1,400)	*to*	$1,300 ($110 to $3,600).
Limited to above LML [c]	$350 ($33 to $950)	*to*	$460 ($41 to $1,300)	$410 ($39 to $1,100)	*to*	$500 ($44 to $1,400)	$450 ($22 to $1,200)	*to*	$590 ($13 to $1,700).
Effects above NAAQS [d]	$76 ($8 to $210)	*to*	$250 ($23 to $760)	$75 ($8 to $210)	*to*	$260 ($23 to $770)	$90 ($10 to $250)	*to*	$320 ($28 to $930).

[a] Values rounded to two significant figures.

[b] PM effects quantified using a no-threshold model. Low end of range reflects dollar value of effects quantified using concentration-response parameter from Krewski et al. (2009) and Smith et al. (2008) studies; upper end quantified using parameters from Lepeule et al. (2012) and Jerrett et al. (2009). Full range of ozone effects is included, and ozone effects range from 19% to 22% of the estimated values.

[c] PM effects quantified at or above the Lowest Measured Level of each long-term epidemiological study. Low end of range reflects dollar value of effects quantified down to LML of Krewski et al. (2009) study (5.8 $\mu g/m^3$); high end of range reflects dollar value of effects quantified down to LML of Lepeule et al. (2012) study (8 $\mu g/m^3$). Full range of ozone effects is still included, and ozone effects range from 20% to 49% of the estimated values.

[d] PM effects only quantified at or above the annual mean of 12 to provide insight regarding the fraction of benefits occurring above the NAAQS. Range reflects effects quantified using concentration-response parameters from Smith et al. (2008) study at the low end and Jerrett et al. (2009) at the high end. Full range of ozone effects is still included, and ozone effects range from 91% to 95% of the estimated values.

To give readers insight to the distribution of estimated benefits displayed in Table 6, the EPA also reports the PM benefits according to alternative concentration cut-points and concentration-response parameters. The percentage of estimated avoided $PM_{2.5}$-related deaths occurring in 2025 below the lowest measured levels (LML) of the two long-term epidemiological studies the EPA uses to estimate risk varies between 5 percent (Krewski et al. 2009) [262] and 69 percent (Lepeule et al. 2012).[263] The percentage of estimated avoided premature deaths occurring in 2025 above the LML and below the NAAQS ranges between 94 percent (Krewski et al. 2009) and 31 percent (Lepeule et al. 2012). Less than 1 percent of the estimated avoided premature deaths occur in 2025 above the annual mean $PM_{2.5}$ NAAQS of 12 $\mu g/m^3$.

Table 7 reports the combined domestic climate benefits and ancillary health co-benefits attributable to changes in SO_2 and NO_X emissions estimated for 3 percent and 7 percent discount rates in the years 2025, 2030, and 2035, in 2016 dollars. This table reports the air pollution effects calculated using $PM_{2.5}$ log-linear no threshold concentration-response functions that quantify risk associated with the full range of $PM_{2.5}$ exposures experienced by the population (U.S. EPA, 2009 [264]; U.S. EPA, 2011 [265]; NRC, 2002 [266]).

TABLE 7—MONETIZED BENEFITS FOR THE ILLUSTRATIVE POLICY SCENARIO, RELATIVE TO THE BASELINE

[Millions of 2016$]

	Values calculated using 3% discount rate			Values calculated using 7% discount rate		
	Domestic climate benefits	Ancillary health co-benefits	Total benefits	Domestic climate benefits	Ancillary health co-benefits	Total benefits
2025	81	390 to 970	470 to 1,000	13	360 to 900	370 to 920.
2030	81	490 to 1,200	570 to 1,300	14	460 to 1,100	470 to 1,100.
2035	72	550 to 1,400	620 to 1,400	13	510 to 1,300	520 to 1,300.

Notes: All estimates are rounded to two significant figures, so figures may not sum due to independent rounding. Climate benefits reflect the value of domestic impacts from CO_2 emissions changes. The ancillary health co-benefits reflect the sum of the $PM_{2.5}$ and ozone co-benefits and reflect the range based on adult mortality functions (*e.g.,* from Krewski et al. (2009) with Smith et al. (2009) to Lepeule et al. (2012) with Jerrett et al. (2009)). The health co-benefits do not account for direct exposure to NO_2, SO_2, and HAP; ecosystem effects; or visibility impairment.

[262] Krewski, D., Jerrett, M., Burnett, R.T., Ma, R., Hughes, E., Shi, Y., Turner, M.C., Pope, C.A., Thurston, G., Calle, E.E., Thun, M.J., Beckerman, B., DeLuca, P., Finkelstein, N., Ito, K., Moore, D.K., Newbold, K.B., Ramsay, T., Ross, Z., Shin, H., Tempalski, B., 2009. Extended follow-up and spatial analysis of the American Cancer Society study linking particulate air pollution and mortality. Res. Rep. Health. Eff. Inst. 5–114–36.

[263] Lepeule, J., Laden, F., Dockery, D., Schwartz, J., 2012. Chronic exposure to fine particles and mortality: An extended follow-up of the Harvard Six Cities study from 1974 to 2009. Environ. Health Perspect. *https://doi.org/10.1289/ehp.1104660.*

[264] U.S. EPA, 2009. Integrated Science Assessment for Particulate Matter. U.S. Environmental Protection Agency, National Center for Environmental Assessment, Research Triangle Park, NC.

[265] U.S. EPA, 2011. Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. Research Triangle Park, NC.

[266] NRC, 2002. Estimating the Public Health Benefits of Proposed Air Pollution Regulations. National Research Council. Washington, DC.

In general, the EPA is more confident in the size of the risks estimated from simulated $PM_{2.5}$ concentrations that coincide with the bulk of the observed PM concentrations in the epidemiological studies that are used to estimate the benefits. Likewise, the EPA is less confident in the risk the EPA estimates from simulated $PM_{2.5}$ concentrations that fall below the bulk of the observed data in these studies.[267] Furthermore, when setting the 2012 PM NAAQS, the Administrator also acknowledged greater uncertainty in specifying the ''magnitude and significance'' of PM-related health risks at PM concentrations below the NAAQS. As noted in the preamble to the 2012 PM NAAQS final rule, ''EPA concludes that it is not appropriate to place as much confidence in the magnitude and significance of the associations over the lower percentiles of the distribution in each study as at and around the long-term mean concentration.'' [268]

Monetized co-benefits estimates shown here do not include several important benefit categories, such as direct exposure to SO_2, NO_X, and HAP including mercury and hydrogen chloride. Although the EPA does not have sufficient information or modeling available to provide monetized estimates of changes in exposure to these pollutants for this rule, the EPA includes a qualitative assessment of these unquantified benefits in the RIA. For more information on the benefits analysis, please refer to the RIA for these rules, which is available in the rulemaking docket.

IV. Changes to the Implementing Regulations for CAA Section 111(d) Emission Guidelines

The EPA is finalizing new regulations to implement CAA section 111(d) (implementing regulations) which will be codified at 40 CFR part 60, subpart Ba. The current implementing regulations at 40 CFR part 60, subpart B, were originally promulgated in 1975.[269] Section 111(d)(1) of the CAA explicitly requires that the EPA prescribe regulations establishing a procedure similar to that under section 110 of the CAA for states to submit plans to the EPA establishing standards of performance for existing sources within their jurisdiction. The implementing regulations have not been significantly revised since their original promulgation in 1975. Notably, the implementing regulations do not reflect CAA section 111(d) in its current form as amended by Congress in 1977, and do not reflect CAA section 110 in its current form as amended by Congress in 1990. Accordingly, the EPA believes that certain portions of the implementing regulations do not appropriately align with CAA section 111(d), contrary to that provision's mandate that the EPA's regulations be ''similar'' in procedure to the provisions of section 110. Therefore, the EPA proposed to promulgate new implementing regulations that are in accordance with the statute in its current form (*See* 83 FR 44746–44813). Agencies have the ability to revisit prior decisions, and the EPA believes it is appropriate to do so here in light of the potential mismatch between certain provisions of the implementing regulations and the statute.[270] While the preamble for the final new implementing regulations are part of the same **Federal Register** document as certain other Agency rules (specifically, the repeal of the CPP and the promulgation of the ACE rule), these new implementing regulations are a separate and distinct rulemaking with its own regulatory text and response to comments. The implementing regulations are not dependent on the other final actions contained in this **Federal Register** document.

The EPA proposed to largely carry over the current implementing regulations in 40 CFR part 60, subpart B to a new subpart that will be applicable to emission guidelines that are finalized either concurrently with or subsequently to final promulgation of the new implementing regulations, as well as to state plans or federal plans associated with such emission guidelines. For purposes of regulatory certainty, the EPA believes it is appropriate to apply these new implementing regulations prospectively and retain the existing implementing regulations as applicable to CAA section 111(d) emission guidelines and associated state plans or federal plans that were promulgated previously. Additionally, because the original implementing regulations also applied to regulations promulgated under CAA section 129 (a provision enacted in the 1990 Amendments that builds on CAA section 111 but provides specific authority to address facilities that combust waste), which has its own statutory requirements distinct from those of CAA section 111(d), the original implementing regulations under 40 CFR part 60, subpart B continue to apply to EPA-regulations promulgated under CAA section 129, and any associated state plans and federal plans. The new implementing regulations are thus applicable only to CAA section 111(d) regulations and associated state plans issued solely under the authority of CAA section 111(d).

The EPA is aware that there are a number of cases where state plan submittal and review processes are still ongoing for existing CAA section 111(d) emission guidelines. Because the EPA is finalizing new state plan and federal plan timing requirements under the implementing regulations to more closely align CAA section 111(d) with both general CAA section 110 state implementation plan (SIP) and federal implementation plan (FIP) timing requirements, and because of the EPA's understanding from experience of the realities of how long these actions typically take, the EPA is applying the new timing requirements to both emission guidelines published after the new implementing regulations are finalized and to all ongoing emission guidelines already published under CAA section 111(d). The EPA is finalizing applicability of the timing changes to all ongoing 111(d) regulations for the same reasons that the EPA is changing the timing requirements prospectively. Based on years of experience working with states to develop SIPs under CAA section 110, the EPA believes that given the comparable amount of work, effort, coordination with sources, and the time required to develop state plans, more time is necessary for the process. Giving states three years to develop state plans is more appropriate than the nine months provided for under the existing implementing regulations, considering the workload required for state plan development. These practical considerations regarding the time needed for state plan development are also applicable and true for recent emission guidelines where the state

[267] The **Federal Register** notice for the 2012 PM NAAQS indicates that ''[i]n considering this additional population level information, the Administrator recognizes that, in general, the confidence in the magnitude and significance of an association identified in a study is strongest at and around the long-term mean concentration for the air quality distribution, as this represents the part of the distribution in which the data in any given study are generally most concentrated. She also recognizes that the degree of confidence decreases as one moves towards the lower part of the distribution.'' *See* 78 FR 3159 (January 15, 2013).

[268] *See* 78 FR 3154, January 15, 2013.

[269] *See* 40 FR 53346.

[270] The authority to reconsider prior decisions exists in part because the EPA's interpretations of statutes it administers ''[are not] instantly carved in stone,'' but must be evaluated ''on a continuing basis.'' *Chevron U.S.A. Inc.* v. *NRDC, Inc.,* 467 U.S. 837, 863–64 (1984). Indeed, ''[a]gencies obviously have broad discretion to reconsider a regulation at any time.'' *Clean Air Council* v. *Pruitt,* 862 F.3d 1, 8–9 (D.C. Cir. 2017).

plan submittal and review process are still ongoing.

For those provisions that are being carried over from the existing implementing regulations into the new implementing regulations, the EPA is not intending to substantively change those provisions from their original promulgation and continues to rely on the record under which they were promulgated. Therefore, the following provisions remain substantively the same from their original promulgation: 40 CFR 60.21a(a)–(d), (g)–(j) (Definitions); 60.22a(a), 60.22a(b)(1)–(3), (b)(5), (c) (Publication of emission guidelines); 60.23a(a)–(c), (d)(3)–(5), (e)–(h) (Adoption and submittal of state plans; public hearings); 60.24a(a)–(d), (f) (Standards of performance and compliance schedules); 60.25a (Emission inventories, source surveillance, reports); 60.26a (Legal authority); 60.27a(a), (e)–(f) (Actions by the Administrator); 60.28a(b) (Plan revisions by the state); and 60.29a (Plan revisions by the Administrator).

As noted at proposal, the EPA is also sensitive to potential confusion over whether these new implementing regulations would apply to emission guidelines previously promulgated or to state plans associated with prior emission guidelines, so the EPA proposed that the new implementing regulations are applicable only to emission guidelines and associated plans developed after promulgation of this regulation, including the emission guidelines being proposed as part of this action for GHGs and existing designated facilities. The EPA is finalizing this proposed applicability of the new implementing regulations.

While the EPA is carrying over a number of requirements from the existing implementing regulations to the new implementing regulations, the EPA is finalizing specific changes to better align the implementing regulations with the statute. These changes are reflected in the regulatory text for the new implementing regulations, and include:

- An explicit provision allowing specific emission guidelines to supersede the requirements of the new implementing regulations;
- Changes to the definition of ''emission guidelines'';
- Updated timing requirements for the submission of state plans;
- Updated timing requirements for the EPA's action on state plans;
- Updated timing requirements for the EPA's promulgation of a federal plan;
- Updated timing requirement for when increments of progress must be included as part of a state plan;
- Completeness criteria and a process for determining completeness of state plan submissions similar to CAA section 110(k)(1) and (2);
- Updated definition replacing ''emission standard'' with ''standard of performance'';
- Usage of the internet to satisfy certain public hearing requirements;
- Elimination of the distinction between public health-based and welfare-based pollutants in emission guidelines; and
- Updated provision allowing for consideration of remaining useful life and other factors to be consistent with CAA section 111(d)(1)(B).

Because the EPA is updating the implementing regulations and many of the provisions from the existing implementing regulations are being carried over, the EPA wants to be clear and transparent with regard to the changes that are being made to the implementing regulations. As such, the EPA is providing Table 8 that summarizes the changes being made.

TABLE 8—SUMMARY OF CHANGES TO THE IMPLEMENTING REGULATIONS

New implementing regulations—Subpart Ba for all future and ongoing CAA section 111(d) emission guidelines	Existing implementing regulations—Subpart B for all previously promulgated CAA section 111(d) emission guidelines
Explicit authority for a new 111(d) emission guidelines requirement to supersede these implementing regulations.	No explicit authority.
Use of term ''standard of performance''	Use of term ''emission standard''.
''Standard of performance'' allows states to include design, equipment, work practice, or operational standards when the EPA determines it is not feasible to prescribe or enforce a standard of performance, consistent with the requirements of CAA section 111(h).	''Emission standard'' allows states to prescribe equipment specifications when the EPA determines it is clearly impracticable to establish an emission standard.
State submission timing: 3 years from promulgation of final emission guidelines.	State submission timing: 9 months from promulgation of final emission guidelines.
EPA action on state plan submission timing: 12 months after determination of completeness.	EPA action on state plan submission timing: 4 months after submittal deadline.
Timing for EPA promulgation of a federal plan, as appropriate: 2 years after finding of plan submission to be incomplete, finding of failure to submit a plan, or disapproval of state plan.	Timing for EPA promulgation of a federal plan, as appropriate: 6 months after submittal deadline.
Increments of progress are required if compliance schedule for a state plan is longer than 24 months after the plan is due.	Increments of progress are required if compliance schedule for a state plan is longer than 12 months after the plan is due.
Completeness criteria and process for state plan submittals	No analogous requirement.
Usage of the internet to satisfy certain public hearing requirements	No analogous requirement.
No distinction made in treatment between health-based and welfare-based pollutants; states may consider remaining useful life and other factors regardless of type of pollutant.	Different provisions for health-based and welfare-based pollutants; state plans must be as stringent as the EPA's emission guidelines for health-based pollutants unless variance provision is invoked.

A. Regulatory Background

The Agency also is, in this action, clarifying the respective roles of the states and the EPA under section 111(d), including by finalizing revisions to the regulations implementing that section in 40 CFR part 60 subpart B. CAA section 111(d)(1) states that the EPA ''Administrator shall prescribe regulations which shall establish a procedure . . . under which each state shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant . . . to which a standard of performance under this section would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such standards of performance.'' [271] CAA section 111(d)(1) also requires the Administrator to ''permit the State in applying a standard of performance to any particular source

[271] *See* 42 U.S.C. 7411(d).

under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.''[272]

As the statute provides, the EPA's authorized role under CAA section 111(d)(1) is to develop a procedure for states to establish standards of performance for existing sources. Indeed, the Supreme Court has acknowledged the role and authority of states under CAA section 111(d): This provision allows ''each State to take the first cut at determining how best to achieve EPA emissions standards within its domain.'' [273] The Court addressed the statutory framework as implemented through regulation, under which the EPA promulgates emission guidelines and the states establish performance standards: ''For existing sources, EPA issues emissions guidelines; in compliance with those guidelines and subject to federal oversight, the States then issue performance standards for stationary sources within their jurisdiction, [42 U.S.C.] 7411(d)(1).'' [274]

As contemplated by CAA section 111(d)(1), states possess the authority and discretion to establish appropriate standards of performance for existing sources. CAA section 111(a)(1) defines ''standard of performance'' as ''a standard of emissions of air pollutants which reflects'' what is commonly referred to as the ''Best System of Emission Reduction'' or ''BSER''—*i.e.,* ''the degree of emission limitation achievable through the application of the *best system of emission reduction* which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.''[275]

In order to effectuate the Agency's role under CAA section 111(d)(1), the EPA promulgated implementing regulations in 1975 to provide a framework for subsequent EPA rules and state plans under CAA section 111(d).[276] The implementing regulations reflect the EPA's principal task under CAA section 111(d)(1), which is to develop a procedure for states to establish standards of performance for existing sources through state plans. The EPA is promulgating an updated version of the implementing regulations. Under the revised implementing regulations, the EPA effectuates its role by publishing ''emission guidelines'' [277] that, among other things, contain the EPA's determination of the BSER for the category of existing sources being regulated.[278] In undertaking this task, the EPA ''will specify different emissions guidelines . . . for different sizes, types and classes of . . . facilities when costs of control, physical limitations, geographic location, or similar factors make subcategorization appropriate.'' [279]

In short, under the EPA's revised regulations implementing CAA section 111(d), which tracks with the existing implementing regulations in this regard, the guideline documents serve to ''provide information for the development of state plans.'' [280] The ''emission guidelines,'' reflecting the degree of emission limitation achievable through application of the BSER determined by the Administrator to be adequately demonstrated, are the principal piece of information states rely on to develop their plans that establish standards of performance for existing sources. Additionally, the Act requires that the EPA permit states to consider, ''among other factors, the remaining useful life'' of an existing source in applying a standard of performance to such sources.[281]

Additionally, while CAA section 111(d)(1) clearly authorizes states to develop state plans that establish performance standards and provides states with certain discretion in determining appropriate standards, CAA section 111(d)(2) provides the EPA specifically a role with respect to such state plans. This provision authorizes the EPA to prescribe a plan for a state ''in cases where the State fails to submit a satisfactory plan.'' [282] The EPA therefore is charged with determining whether state plans developed and submitted under CAA section 111(d)(1) are ''satisfactory,'' and the new implementing regulations at 40 CFR 60.27a accordingly provide timing and procedural requirements for the EPA to make such a determination. Just as guideline documents may provide information for states in developing plans that establish standards of performance, they may also provide information for the EPA to consider when reviewing and taking action on a submitted state plan, as the new implementing regulations at 40 CFR 60.27a(c) reference the ability of the EPA to find a state plan as ''unsatisfactory because the requirements of (the implementing regulations) have not been met.'' [283]

B. Provision for Superseding Implementing Regulations

The EPA proposed to include a provision in the new implementing regulations that expressly allows for any emission guidelines to supersede the applicability of the implementing regulations as appropriate, parallel to a provision contained in the 40 CFR part 63 General Provisions implementing section 112 of the CAA. The EPA cannot foresee all of the unique circumstances and factors associated with particular future emission guidelines, and therefore different requirements may be necessary for a particular 111(d) rulemaking that the EPA cannot envision at this time. The EPA is finalizing this provision as proposed.

C. Changes to the Definition of ''Emission Guidelines''

The existing implementation regulations under 40 CFR 60.21(e) contain a definition of ''emission guidelines,'' defining them as guidelines which reflect the degree of emission reduction achievable through the application of the BSER which (taking into account the cost of such reduction) the Administrator has determined has been adequately demonstrated for designated facilities. This definition additionally references that emission guidelines may be set forth in 40 CFR part 60, subpart C, or a ''final guideline document'' published under 40 CFR 60.22(a). While the implementing regulations do not define the term ''final guideline document,'' 40 CFR 60.22 generally contains a number of requirements pertaining to the contents of guideline documents, which are intended to provide information for the development of state plans.[284] The preambles for both the proposed and final existing implementing regulations suggest that ''emission guidelines''

[272] *Id.*

[273] *Am. Elec. Power Co.* v. *Connecticut,* 131 S. Ct. 2527, 2539 (2011).

[274] *Id.* at 2537–38.

[275] 42 U.S.C. 7411(a)(1) (emphasis added).

[276] *See* 40 CFR part 60, subpart B (hereafter referred to as the ''implementing regulations'').

[277] *See* section IV.B. for the changes to the definition of ''emission guidelines'' as part of the EPA's new implementing regulations.

[278] *See* 40 CFR 60.22a(b) (''Guideline documents published under this section will provide information for the development of State plans, such as: . . . (4) An emission guideline that reflects the application of the best system of emission reduction (considering the cost of such reduction) that has been adequately demonstrated.'').

[279] 40 CFR 60.22(b)(5).

[280] 40 CFR 60.22a(b).

[281] 42 U.S.C. 7411(d)(1).

[282] *Id.* 7411(d)(2)(A).

[283] *See also* 40 FR 53343 (''If there is to be substantive review, there must be criteria for the review, and EPA believes it is desirable (if not legally required) that the criteria be made known in advance to the States, to industry, and to the general public. The emission guidelines, each of which will be subjected to public comment before final adoption, will serve this function.'').

[284] *See* 40 CFR 60.22(b).

would be guidelines provided by the EPA that reflect the degree of emission limitation achievable by the BSER. In the proposal for this action, the EPA described that it is important to provide information on such degree of emission limitation in order to guide states in their establishment of standards of performance as required under CAA section 111(d). However, the EPA also explained that it did not believe anything in CAA section 111(a)(1) or 111(d) compels the EPA to provide a presumptive emission standard that reflects the degree of emission limitation achievable by application of the BSER. Accordingly, as part of the proposed new implementing regulations, the EPA proposed to re-define ''emission guidelines'' as final guideline documents published under 40 CFR 60.22a(a) that include information on the degree of emission reduction achievable through the application of the BSER which (taking into account the cost of such reduction and any non-air quality health and environmental impact and energy requirements) the EPA has determined has been adequately demonstrated for designated facilities.

The EPA received substantial comments regarding this proposed change to the implementing regulations. Commenters contend that because CAA section 111(a)(1) requires the EPA to identify the BSER, it is also the EPA's statutory responsibility to identify the degree of emission limitation achievable through application of the BSER. According to commenters, the identification of a BSER without an accompanying emission limitation reflecting its application is an incomplete identification of the system of emission reduction itself, as it is the manner and degree of application of a system that often determines the quantity and cost of the emission reductions achieved, as well as any implications for energy requirements—factors that are statutorily a component of the BSER analysis delegated to the EPA.

The EPA has considered carefully these comments and is not finalizing the proposed changes to the definition of ''emission guidelines'' regarding the aspect of such guidelines reflecting the degree of emission limitation achievable through application of the BSER. The EPA is finalizing a definition of ''emission guidelines'' that requires them to reflect the degree of emission limitation of emission achievable through application of the BSER, as well as updates to the definition consistent with CAA section 111(a)(1) (*e.g.,* including a reference to ''energy requirements'' which was not present in the original definition). Relatedly, the EPA is not finalizing changes to proposed 40 CFR 60.21a(e) requiring the EPA in emission guidelines to provide *information* on the degree of emission limitation achievable through application of the BSER rather than such degree of emission limitation itself. While the statute is ambiguous as to whose role (*i.e.,* the EPA's or the states') it is to determine the degree of emission limitation achievable through application of the BSER in the context of standards of performance for existing sources, the EPA believes it is reasonable to construe this aspect of CAA section 111 as included within the EPA's obligation to determine the BSER. While states are better positioned to evaluate source-specific factors and circumstances in establishing standards of performance, the EPA agrees with commenters that because the EPA evaluates components such as cost of emission reductions and environmental impacts on a broader, systemwide scale when determining the BSER, if a state instead were to determine the degree of emission limitation achievable for the sources within its borders, these factors will naturally be re-balanced on a smaller scale than the EPA's calculation and likely re-define the BSER in the process. Under the cooperative federalism structure of CAA section 111, the EPA determines the BSER and the associated level of stringency (*i.e.,* the degree of emission limitation achievable through application of the BSER), but states may where appropriate relax this level of stringency when establishing standards of performance by accounting for source-specific factors such as remaining useful life. Accordingly, given the EPA's role in determining the BSER, the EPA is retaining the requirement from the original implementing regulations that emission guidelines reflect the degree of emission limitation achievable through application of the BSER, rather than finalizing the proposed change that emission guidelines provide information on such degree of emission limitation achievable.

D. Updates to Timing Requirements

The timing requirements in the existing implementing regulations for state plan submissions, the EPA's action on state plan submissions, and the EPA's promulgation of federal plans generally track the timing requirements for SIPs and federal implementation plans (FIPs) under the 1970 version of the CAA. The existing implementing regulations at 60.23(a)(1) require state plans to be submitted to the EPA within nine months after publication of final emission guidelines, unless otherwise specified in emission guidelines. Congress subsequently revised the SIP and FIP timing requirements in section 110 as part of the 1990 CAA Amendments. The EPA proposed to update accordingly the timing requirements regarding state and federal plans under CAA section 111(d) to be consistent with the current timing requirements for SIPs and FIPs under section 110.[285]

Commenters contend that premising the proposed longer timelines for state plans based on the timelines for SIPs and FIPs is inappropriate because CAA section 111(d) state plans are narrower in scope and less complex than section 110 SIPs for a number of reasons. According to commenters, these reasons include: (1) Because state plans cover one source category, whereas SIPs cover the different types of sources whose emissions must be reduced to meet an ambient air quality standard; (2) because sources under state plans are required to meet an emission standard expressed as a rate or mass limitation, whereas SIPs are required to assure that ambient air within a state stay below the NAAQS, which requires monitoring, modeling, and other complicated considerations; and (3) EPA already does a substantial percentage of the work for states in the first instance by determining the BSER and the degree of emission limitation achievable through application of the BSER.

While it is correct that the main requirement under CAA section 111(d) is for state plans to establish standards of performance for designated facilities, and that these existing-source performance standards are informed by the degree of emission limitation achievable through application of the BSER that EPA identifies, CAA section 111(d)(1)(B) also requires state plans to include measures that provide for the implementation and enforcement of such standards. The implementing regulations further clarify what those measures may be, such as monitoring, reporting, and recordkeeping requirements, but the regulations do not specify the types of measures that may satisfy those requirements (*e.g.,* what type of monitoring is adequate to measure compliance for a particular source category). Nor do the implementing regulations contain an exhaustive list of implementation and enforcement measures given that the nature of a specific state plan, or individual source subject to a state plan, may necessitate tailored implementation

[285] *See* 84 FR 44746–813.

and enforcement measures that the EPA has not, or cannot, prescribe.

Establishment of standards of performance under CAA section 111(d) state plans also may not be as straightforward as commenters suggest, as states have the authority to consider remaining useful life and other factors in applying a standard to a designated facility. While the EPA defines the degree of emission limitation achievable through application of the BSER, it is the state that must evaluate whether there are source-specific considerations which necessitate development of a different standard than the degree of emission limitation that the EPA identifies. Commenters do not provide any information suggesting development of such standards, or development of appropriate implementation and enforcement measures generally, would take some shorter period of time to formulate and adopt for submission of a state plan than the three years the EPA proposed. Therefore, for these reasons, commenters fail to recognize that while CAA section 111(d) is not the same as CAA section 110 in the scope of its requirements, state plans under CAA section 111(d) have their own complexities and realities that take time to address in the development of state plans.

To the contrary, it has been the EPA's experience over decades in the SIP context that states often do need and take much, if not all, of the three-year period under section 110 for the process of developing and adopting SIPs, even if a required SIP submission is relatively narrow in scope and nature. To the extent the EPA determines a shorter timeline is appropriate for the submission of state plans under CAA section 111(d), for example based on the nature of the pollution problem involved, the EPA has authority under the implementing regulations to impose a shorter deadline in specific emission guidelines. Relatedly, the EPA also proposed that it would be required to propose a federal plan ''within'' two years, and nothing in this provision precludes the EPA from promulgating a federal plan at any period within that span of two years if it deems appropriate.

For all of these reasons and based on its experience, the EPA believes it is at least reasonable to construe Congress's direction that it establish a procedure ''similar'' under that of CAA section 110 to authorize it to provide the same timing requirements for state and federal plans under CAA section 111(d) as Congress provided under CAA section 110, and indeed that this direction may indicate Congress's specific intention that the EPA adopt those same timing requirements. The EPA is finalizing, as part of new implementing regulations, a requirement that states adopt and submit a state plan to the EPA within three years after the notice of the availability of the final emission guidelines. Because of the amount of work, effort, and time required for developing state plans that include unit-specific standards, and implementation and enforcement measures for such standards, the EPA believes that extending the submission date of state plans from nine months to three years is appropriate. Because states have considerable flexibility in implementing CAA section 111(d), this timing also allows states to interact and work with the Agency in the development of their state plans and to minimize the chances of unexpected issues arising that could slow down eventual approval of state plans. The EPA notes that nothing in CAA section 111(d) or the implementing regulations preclude states from submitting state plans earlier than the applicable deadline. The EPA also is finalizing to give itself discretion to determine, in specific emission guidelines, that a shorter time period for the submission of state plans particular to that emission guidelines is appropriate. Such authority is consistent with CAA section 110(a)(1)'s grant of authority to the Administrator to determine that a period shorter than three years is appropriate for the submission of particular SIPs implementing the NAAQS.

Following submission of state plans, the EPA will review plan submittals to determine whether they are ''satisfactory'' pursuant to CAA section 111(d)(2)(A). Given the flexibilities CAA section 111(d) and emission guidelines generally accord to states, and the EPA's prior experience on reviewing and acting on SIPs under section 110, the EPA is extending the period for EPA review and approval or disapproval of plans from the four-month period provided in the 1975 implementing regulations to a twelve-month period after a determination of completeness (either affirmatively by the EPA or by operation of law, see section IV.F. for the new implementing regulations' treatment of completeness) as part of the new implanting regulations. This timeline will provide adequate time for the EPA to review plans and follow notice-and-comment rulemaking procedures to ensure an opportunity for public comment on the EPA's proposed action on a state plan.

The EPA additionally is extending the timing for the EPA to promulgate a federal plan from six months in the existing implementing regulations to two years, as part of the new implementing regulations. This two-year timeline is consistent with the FIP deadline under section 110(c) of the CAA. The EPA is finalizing provisions in the new implementing regulations [286] that provide that it has the authority to promulgate a federal plan within two years if it:

- Finds that a state failed to submit a plan required by emission guidelines and CAA section 111(d);
- Makes a finding that a state plan submission is incomplete, as described under the new completeness requirements and criteria in 40 CFR 60.27a(g); or
- Disapproves a state plan submission.

E. Compliance Deadlines

The previous implementing regulations required that any compliance schedule for state plans extending more than 12 months from the date required for submittal of the plan must include legally enforceable increments of progress to achieve compliance for each designated facility or category of facilities.[287] However, as described in section IV.D, the EPA is finalizing updates to the timing requirements for the submission of, and action on, state plans. Consequently, it follows that the requirement for increments of progress also should be updated in order to align with the new timelines. Given that the EPA is finalizing a period of up to 18 months for its action on state plans (*i.e.,* 12 months from the determination that a state plan submission is complete, which could occur up to six months after receipt of the state plan), the EPA believes it is appropriate that the requirement for increments of progress should attach to plans that contain compliance periods that are longer than the period provided for the EPA's review of such plans. This way, sources subject to a plan will have more certainty that their regulatory compliance obligations would not change between the period when a state plan is due and when the EPA acts on a plan. Accordingly, the EPA is requiring that states include provisions for increments of progress where their state plans contain compliance schedules longer than 24 months from

[286] 40 CFR 60.27a(c).

[287] 40 CFR 60.24(e)(1).

the date when state plans are due for particular emission guidelines.

F. Completeness Criteria

Similar to requirements regarding determinations of completeness under CAA section 110(k)(1), the EPA is finalizing completeness criteria that provide the Agency with a means to determine whether a state plan submission includes the minimum elements necessary for the EPA to act on the submission. The EPA determines completeness simply by comparing the state's submission against these completeness criteria. In the case of SIPs under CAA section 110(k)(1), the EPA promulgated completeness criteria in 1990 at appendix V to 40 CFR part 51.[288] The EPA is adopting criteria similar to the criteria set out at section 2.0 of appendix V for determining the completeness of submissions under CAA section 111(d).

The EPA notes that the addition of completeness criteria in the framework regulations does not alter any of the submission requirements states already have under any applicable emission guidelines. The completeness criteria in this action are those that would generally apply to all plan submissions under CAA section 111(d), but specific emission guidelines may supplement these general criteria with additional requirements.

The completeness criteria that the EPA is finalizing in this action can be grouped into administrative materials and technical support. For administrative materials, the completeness criteria mirror criteria for SIP submissions because the two programs have similar administrative processes. Under these criteria, the submittal must include the following:

(1) A formal letter of submittal from the Governor or the Governor's designee requesting EPA approval of the plan or revision thereof;

(2) Evidence that the state has adopted the plan in the state code or body of regulations; or issued the permit, order, or consent agreement (hereafter ''document'') in final form. That evidence must include the date of adoption or final issuance as well as the effective date of the plan, if different from the adoption/issuance date;

(3) Evidence that the state has the necessary legal authority under state law to adopt and implement the plan;

(4) A copy of the official state regulation(s) or document(s) submitted for approval and incorporated by reference into the plan, signed, stamped, and dated by the appropriate state official indicating that they are fully adopted and enforceable by the state. The effective date of the regulation or document must, whenever possible, be indicated in the document itself. The state's electronic copy must be an exact duplicate of the hard copy. For revisions to the approved plan, the submission must indicate the changes made to the approved plan by redline/strikethrough;

(5) Evidence that the state followed all applicable procedural requirements of the state's regulations, laws, and constitution in conducting and completing the adoption/issuance of the plan;

(6) Evidence that public notice was given of the plan or plan revisions with procedures consistent with the requirements of 40 CFR 60.23, including the date of publication of such notice;

(7) Certification that public hearing(s) were held in accordance with the information provided in the public notice and the state's laws and constitution, if applicable and consistent with the public hearing requirements in 40 CFR 60.23.; and

(8) Compilation of public comments and the state's response thereto.

In addition, the technical support required for all plans must include each of the following:

(1) Description of the plan approach and geographic scope;

(2) Identification of each designated facility; identification of emission standards for each designated facility; and monitoring, recordkeeping, and reporting requirements that will determine compliance by each designated facility;

(3) Identification of compliance schedules and/or increments of progress;

(4) Demonstration that the state plan submission is projected to achieve emissions performance under the applicable emission guidelines;

(5) Documentation of state recordkeeping and reporting requirements to determine the performance of the plan as a whole; and

(6) Demonstration that each emission standard is quantifiable, permanent, verifiable, and enforceable.

The EPA intends that these criteria generally be applicable to all CAA section 111(d) plans submitted on or after the date on which final new implementing regulations are promulgated, with the proviso that specific emission guidelines may provide otherwise.

Consistent with the requirements of CAA section 110(k)(1)(B) for SIPs, the EPA is finalizing that the EPA will determine whether a state plan is complete (*i.e.,* meets the completeness criteria) by no later than 6 months after the date, if any, by which a state is required to submit the plan. The EPA requires that any plan or plan revision that a state submits to the EPA, and that has not been determined by the EPA by the date 6 months after receipt of the submission to have failed to meet the minimum completeness criteria, shall on that date be deemed by operation of law to be a complete state plan. Then, as previously discussed, the EPA relatedly is finalizing that the EPA will act on a state plan submission through notice-and-comment rulemaking within 12 months after determining a plan is complete either through an affirmative determination or by operation of law.

When plan submissions do not contain the minimum elements, the EPA will find that a state has failed to submit a complete plan through the same process as finding a state has made no submission at all. Specifically, the EPA will notify the state that its submission is incomplete and that it therefore has not submitted a required plan, and the EPA will also publish a finding of failure to submit in the **Federal Register**, which triggers the EPA's obligation to promulgate a federal plan for the state. This determination that a submission is incomplete and that the state has failed to submit a plan is ministerial in nature and requires no exercise of discretion or judgment on the Agency's part, nor does it reflect a judgment on the eventual approvability of the submitted portions of the plan.

G. Standard of Performance

As previously described, the implementing regulations were promulgated in 1975 and effectuated the 1970 version of the CAA as it existed at that time. The 1970 version of CAA section 111(d) required state plans to include ''emission standards'' for existing sources, and consequently the implementing regulations refer to this term. However, as part of the 1977 amendments to the CAA, Congress replaced the term ''emission standard'' in section 111(d) with ''standard of performance.'' The EPA has not since revised the implementing regulations to reflect this change in terminology. For clarity's sake and to better track with statutory requirements, the EPA is determining to include a definition of ''standard of performance'' as part of the new implementing regulations, and to consistently refer to this term as appropriate within those regulations in lieu of referring to an ''emission standard.'' In any event, the current definition of ''emission standard'' in the implementing regulations is incomplete and would need to be revised. For

[288] 55 FR 5830; February 16, 1990.

example, the definition encompasses equipment standards, which is an alternative form of standard provided for in CAA section 111(h) under certain circumstances. However, CAA section 111(h) provides for other forms of alternative standards, such as work practice standards, which are not covered by the existing regulatory definition of ''emission standard.'' Furthermore, the definition of ''emission standard'' encompasses allowance systems, a reference that was added as part of the EPA's CAMR.[289] This rule was vacated by the D.C. Circuit, and therefore this added component to the definition of ''emission standard'' had no legal effect because of the Court's vacatur. Consistent with the Court's opinion, the EPA signaled its intent to remove this reference as part of its MATS rule.[290] However, in the final regulatory text of that rulemaking, the EPA did not take action removing this reference, and it remains as a vestigial artifact.

For these reasons, the EPA is replacing the existing definition of ''emission standard'' with a definition of ''standard of performance'' that tracks with the definition provided for under CAA section 111(a)(1). This means a standard of performance for existing sources would be defined as a standard for emissions of air pollutants that reflects the degree of emission limitation achievable through the application by the state of the BSER which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Several commenters expressed concern that the proposed definition of ''standard of performance'' in conjunction with the proposal to strike the reference to allowance-based systems precluded states from including mass-based standards of performance. Commenters misunderstand the EPA's proposal, which did not propose that the new definition of ''standard of performance'' itself would specify either rate-based or mass-based standards. As explained at proposal, the new definition is intended to track the definition of the same term in CAA section 111(a)(1), which does not specify that standards of performance must be rate or mass-based. Rather, the EPA may determine in particular emission guidelines the appropriate form of the standard that a state plan must include, based on considerations specific to those emission guidelines, such as the BSER determination, the nature of the pollutant and affected source-category being regulated, and other relevant factors. The EPA believes the term ''standard of performance'' alone does not require or preclude that the standard be in rate or mass-based form, whereas the prior definition of ''emission standard'' was actually more restrictive in that it specified rate-based standards and allowance-based systems, but it did not identify other mass-based standards (such as limits) as permissible.

Similarly, other commenters stated that the definition in the implementing regulations should be clarified to encompass unambiguously rates of any kind (*e.g.,* input-based or output-based), quantities, concentrations, or percentage reductions, consistent with statutory language. However, as previously described, the term ''standard of performance'' alone does not specify which form the standard must take, and such specification is appropriately made in a particular emission guideline depending on considerations such as the nature of the BSER, source category, and pollutant for that rule. Therefore, the EPA is finalizing the definition of ''standard of performance'' as proposed and clarifying that the definition alone does not preclude any form of rate or mass-based standards, but particular emission guidelines may specify the appropriate form of standards that a state plan under such guidelines can or cannot include.

The EPA is further finalizing a definition of standard of performance that incorporates CAA section 111(h)'s allowance for design, equipment, work practice, or operational standards as alternative standards of performance under the statutorily prescribed circumstances. The previous implementing regulations allowed for state plans to prescribe equipment specifications when emission rates are ''clearly impracticable'' as determined by the EPA. CAA section 111(h)(1), by contrast, allows for alternative standards such as equipment standards to be promulgated when standards of performance are ''not feasible to prescribe or enforce,'' as those terms are defined under CAA section 111(h)(2). Given the potential discrepancy between the conditions under which alternative standards may be established based on the different terminology used by the statute and existing implementing regulations, the EPA is establishing in the new implementing regulations the ''not feasible to prescribe or enforce'' language as the condition under which alternative standards may be established.

H. Remaining Useful Life and Other Factors Provisions

The EPA believes that the previous implementing regulations' distinction between public health-based and welfare-based pollutants is not a distinction unambiguously required under CAA section 111(d) or any other applicable provision of the statute. The EPA does not believe the nature of the pollutant in terms of its impacts on health and/or welfare impact the manner in which it is regulated under this provision. Particularly, 60.24(c) requires that for health-based pollutants, a state's standards of performance must be of equivalent stringency to the EPA's emission guidelines. However, CAA section 111(d)(1)(B) states that the EPA's regulations ''shall'' permit states to take into account, among other factors, a designated facility's remaining useful life when establishing an appropriate standard of performance. In other words, Congress explicitly envisioned under CAA section 111(d)(1)(B) that states could implement standards of performance that vary from the EPA's emission guidelines under appropriate circumstances. Notably, the pre-existing implementing regulations at § 60.24(f) contain a provision that allows for states to also apply less stringent standards on sources under certain circumstances.[291] However, this provision attaches to the distinction between health-based and welfare-based pollutants and is available to the states only under the EPA's discretion. This provision was also promulgated prior to Congress's addition of the requirement in CAA section 111(d)(1)(B) that the EPA permit states to take into account remaining useful life and other factors, and the terms of the regulatory provision and statutory provision do not match one another, meaning that this provision may not account for all of the factors envisioned under CAA section 111(d)(1)(B). Given all of these considerations, the EPA is finalizing in the new implanting regulations provisions that remove the distinction between health-based and welfare-based pollutants and associated requirements contingent upon this distinction. The EPA is also finalizing a new provision to permit states to take into account remaining useful life, among other

[289] 70 FR 28605.

[290] 77 FR 9304.

[291] The EPA is hereafter no longer referring to 40 CFR 60.24(f) or its corollary under the new implementing regulations as the ''variance provision.'' The EPA is instead using the phrase ''remaining useful life and other factors'' when referring to this provision, as this phrase is consistent with the terminology used in CAA section 111(d)(1) and better reflects the states' role and authority in establishing standards of performance under CAA section 111(d) generally.

factors, in establishing a standard of performance for a particular designated facility, consistent with CAA section 111(d)(1)(B).

Under this new ''remaining useful life and other factors'' provision, these following factors may be considered, among others:

- Unreasonable cost of control resulting from plant age, location, or basic process design;
- Physical impossibility of installing necessary control equipment; or
- Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

Given that there are unique attributes and aspects of each designated facility, it is not possible for the EPA to define each and every circumstance that states may consider when applying a standard of performance under CAA section 111(d); accordingly, this list is not intended to be exclusive of other source-specific factors that a state may permissibly take into account in developing a satisfactory plan establishing standards of performance for existing sources within its jurisdiction. Such ''other factors'' referred to under the remaining useful life and other factors provision may be ones that influence decisions to invest in technologies to meet a potential performance standard. Such other factors may include timing considerations like payback period for investments, the timing of regulatory requirements, and other unit-specific criteria. A state may account for remaining useful life and other factors as it determines appropriate for a specific source, so long as the state adopts a reasonable approach and adequately explains that approach in its submission to the EPA.

V. Statutory and Executive Order Reviews

Additional information about these Statutory and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This final action is an economically significant action that was submitted to the OMB for review. Any changes made in response to OMB recommendations have been documented in the docket. The EPA prepared an analysis of the compliance cost, benefit, and net benefit impacts associated with this action in the analytical timeframe of 2023 to 2037. This analysis, which is contained in the Regulatory Impact Analysis (RIA) for this final action, is consistent with Executive Order 12866 and is available in the docket for this action.

In the RIA for this final action, the Agency provides a full benefit-cost analysis of an illustrative policy scenario representing ACE, which models HRI at coal-fired EGUs. This illustrative policy scenario, described in greater detail in section III.F above, represents potential outcomes of state determinations of standards of performance, and compliance with those standards by affected coal-fired EGUs. Throughout the RIA, the illustrative policy scenario is compared against a single baseline. As described in Chapter 2 of the RIA, the EPA believes that a single baseline without the CPP represents a reasonable future against which to assess the potential impacts of the ACE rule. The EPA also provides analysis in Chapter 2 of the RIA that satisfies any need for regulatory impact analysis that may be required by statute or executive order for the repeal of the CPP.

The EPA evaluates the potential regulatory impacts of the illustrative policy scenario using the present value (PV) of costs, benefits, and net benefits, calculated for the timeframe of 2023–2037 from the perspective of 2016, using both a three percent and seven percent end-of-period discount rate. In addition, the EPA presents the assessment of costs, benefits, and net benefits for specific snapshot years, consistent with historic practice. These specific snapshot years are 2025, 2030, and 2035.

The power industry's ''compliance costs'' are represented in this analysis as the change in electric power generation costs between the baseline and illustrative policy scenario, including the cost of monitoring, reporting, and recordkeeping. The EPA also reports the impact on climate benefits from changes in CO_2 and the impact on health benefits attributable to changes in SO_2, NO_X, and $PM_{2.5}$ emissions. More detailed descriptions of the cost and benefit impacts of these rulemakings are presented in section III.F above.

Table 9 presents the PV and equivalent annualized value (EAV) of the estimated costs, domestic climate benefits, ancillary health co-benefits, and net benefits of the illustrative policy scenario for the timeframe of 2023–2037, relative to the baseline. The EAV represents an even-flow of figures over the timeframe of 2023–2037 that would yield an equivalent present value. The EAV is identical for each year of the analysis, in contrast to the year-specific estimates presented earlier for the snapshot years of 2025, 2030, and 2035. Table 10 presents the estimates for the specific snapshot years of 2025, 2030, and 2035.

TABLE 9—PRESENT VALUE AND EQUIVALENT ANNUALIZED VALUE OF COMPLIANCE COSTS, DOMESTIC CLIMATE BENEFITS, ANCILLARY HEALTH CO-BENEFITS, AND NET BENEFITS, ILLUSTRATIVE POLICY SCENARIO, 3 AND 7 PERCENT DISCOUNT RATES, 2023–2037

[Millions of 2016$]

	Costs		Domestic climate benefits		Ancillary health co-benefits		Net benefits	
	3%	7%	3%	7%	3%	7%	3%	7%
Present Value	1,600	970	640	62	4,000 to 9,800	2,000 to 5,000	3,000 to 8,800	1,100 to 4,100.
Equivalent Annualized Value	140	110	53	6.9	330 to 820	220 to 550	250 to 730	120 to 450.

Notes: All estimates are rounded to two significant figures, so figures may not sum due to independent rounding. Climate benefits reflect the value of domestic impacts from CO_2 emissions changes. The ancillary health co-benefits reflect the sum of the $PM_{2.5}$ and ozone benefits from changes in electricity sector SO_2 and NO_X emissions and reflect the range based on adult mortality functions (*e.g.,* from Krewski et al. (2009) with Smith et al. (2009)[292] to Lepeule et al. (2012) with Jerrett et al. (2009)).[293]

[292] Smith, R.L., Xu, B., Switzer, P., 2009. Reassessing the relationship between ozone and short-term mortality in U.S. urban communities. Inhal. Toxicol. 21 Suppl 2, 37–61. *https://doi.org/10.1080/08958370903161612.*

[293] Jerrett, M., Burnett, R.T., Pope, C.A., Ito, K., Thurston, G., Krewski, D., Shi, Y., Calle, E., Thun, M., 2009. Long-term ozone exposure and mortality. N. Engl. J. Med. 360, 1085–95. *https://doi.org/10.1056/NEJMoa0803894.*

TABLE 10—COMPLIANCE COSTS, DOMESTIC CLIMATE BENEFITS, ANCILLARY HEALTH CO-BENEFITS, AND NET BENEFITS IN 2025, 2030, AND 2035, ILLUSTRATIVE POLICY SCENARIO, 3 AND 7 PERCENT DISCOUNT RATES

[Millions of 2016$]

	Costs		Domestic climate benefits		Ancillary health co-benefits		Net benefits	
	3%	7%	3%	7%	3%	7%	3%	7%
2025	290	290	81	13	390 to 970	360 to 900	180 to 760	84 to 630.
2030	280	280	81	14	490 to 1,200	460 to 1,100	300 to 1,000	200 to 860.
2035	25	25	72	13	550 to 1,400	510 to 1,300	600 to 1,400	500 to 1,200.

Notes: All estimates are rounded to two significant figures, so figures may not sum due to independent rounding. Climate benefits reflect the value of domestic impacts from CO_2 emissions changes. The ancillary health co-benefits reflect the sum of the $PM_{2.5}$ and ozone benefits from changes in electricity sector SO_2 and NO_X emissions and reflect the range based on adult mortality functions (*e.g.,* from Krewski et al. (2009) with Smith et al. (2009) to Lepeule et al. (2012) with Jerrett et al. (2009)).

In the decision-making process it is useful to consider the change in benefits due to the targeted pollutant relative to the costs. Therefore, in Chapter 6 of the RIA for this final action the Agency presents a comparison of the benefits from the targeted pollutant—CO_2—with the compliance costs. Excluded from this comparison are the benefits from changes in $PM_{2.5}$ and ozone concentrations from changes in SO_2, NO_X, and $PM_{2.5}$ emissions that are projected to accompany changes in CO_2 emissions.

Table 11 presents the PV and EAV of the estimated costs, benefits, and net benefits associated with the targeted pollutant, CO_2, for the timeframe of 2023–2037, relative to the baseline. In Table 11 and Table 12, negative net benefits are indicated with parenthesis.

TABLE 11—PRESENT VALUE AND EQUIVALENT ANNUALIZED VALUE OF COMPLIANCE COSTS, CLIMATE BENEFITS, AND NET BENEFITS ASSOCIATED WITH TARGETED POLLUTANT (CO_2), ILLUSTRATIVE POLICY SCENARIO, 3 AND 7 PERCENT DISCOUNT RATES, 2023–2037

[Millions of 2016$]

	Costs		Domestic climate benefits		Net benefits associated with the targeted pollutant (CO_2)	
	3%	7%	3%	7%	3%	7%
Present Value	1,600	970	640	62	(980)	(910)
Equivalent Annualized Value	140	110	53	6.9	(82)	(100)

Notes: Negative net benefits indicate forgone net benefits. All estimates are rounded to two significant figures, so figures may not sum due to independent rounding. Climate benefits reflect the value of domestic impacts from CO_2 emissions changes. This table does not include estimates of ancillary health co-benefits from changes in electricity sector SO_2 and NO_X emissions.

Table 12 presents the costs, benefits, and net benefits associated with the targeted pollutant for specific years, rather than as a PV or EAV as found in Table 11.

TABLE 12—COMPLIANCE COSTS, CLIMATE BENEFITS, AND NET BENEFITS ASSOCIATED WITH TARGETED POLLUTANT (CO_2) IN 2025, 2030, AND 2035, ILLUSTRATIVE POLICY SCENARIO, 3 AND 7 PERCENT DISCOUNT RATES

[Millions of 2016$]

	Costs		Domestic climate benefits		Net benefits associated with the targeted pollutant (CO_2)	
	3%	7%	3%	7%	3%	7%
2025	290	290	81	13	(210)	(280)
2030	280	280	81	14	(200)	(260)
2035	25	25	72	13	47	(11)

Notes: Negative net benefits indicate forgone net benefits. All estimates are rounded to two significant figures, so figures may not sum due to independent rounding. Climate benefits reflect the value of domestic impacts from CO_2 emissions changes. This table does not include estimates of ancillary health co-benefits from changes in electricity sector SO_2 and NO_X emissions.

Throughout the RIA for this action, the EPA considers a number of sources of uncertainty, both quantitatively and qualitatively. The RIA also summarizes other potential sources of benefits and costs that may result from these rules that have not been quantified or monetized.

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This action is expected to be an Executive Order 13771 regulatory action. Details on the estimated costs of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action.

C. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to the Office of Management and Budget (OMB) under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned the EPA ICR number 2503.04. A copy of the ICR can be found in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

The information collection requirements are based on the recordkeeping and reporting burden associated with developing, implementing, and enforcing a state plan to limit CO_2 emissions from existing sources in the power sector. These recordkeeping and reporting requirements are specifically authorized by CAA section 114 (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to Agency policies set forth in 40 CFR part 2, subpart Ba.

Respondents/affected entities: 48—the 48 contiguous states;

Respondent's obligation to respond: The EPA expects state plan submissions from 43 of the 48 contiguous states and negative declarations from Vermont, California, Maine, Idaho, and Rhode Island.

Frequency of response: Yearly.

Total estimated burden: 192,640 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $21,500 annualized capital or operation and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce the approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

After considering the economic impacts of this rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule will not impose any requirements on small entities. Specifically, emission guidelines established under CAA section 111(d) do not impose any requirements on regulated entities and, thus, will not have a significant economic impact upon a substantial number of small entities. After emission guidelines are promulgated, states develop and submit to the EPA plans that establish performance standards for existing sources within their jurisdiction, and it is those state requirements that could potentially impact small entities. Our analysis in the accompanying RIA is consistent with the analysis of the analogous situation arising when the EPA establishes NAAQS, which do not impose any requirements on regulated entities. As with the description in the RIA, any impact of a NAAQS on small entities would only arise when states take subsequent action to maintain and/or achieve the NAAQS through their state implementation plans.[294]

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments.

This action does not contain a federal mandate that may result in expenditures of $100 million or more for state, local, and tribal governments, in the aggregate or the private sector in any one year. Specifically, the emission guidelines proposed under CAA section 111(d) do not impose any direct compliance requirements on regulated entities, apart from the requirement for states to develop state plans. The burden for states to develop state plans in the three-year period following promulgation of the rule was estimated and is listed in section IV.A. above, but this burden is estimated to be below $100 million in any one year. Thus, this rule is not subject to the requirements of section 203 or section 205 of the Unfunded Mandates Reform Act (UMRA).

This rule is also not subject to the requirements of section 203 of UMRA because, as described in 2 U.S.C. 1531–38, it contains no regulatory requirements that might significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

The EPA has concluded that this action may have federalism implications because it might impose substantial direct compliance costs on state or local governments, and the federal government will not provide the funds necessary to pay those costs. The development of state plans will entail many hours of staff time to develop and coordinate programs for compliance with the proposed rule, as well as time to work with state legislatures as appropriate, and develop a plan submittal. The Agency understands the burden that these actions will have on states and is committing to providing aid and guidance to states through the plan development process. The EPA will be available at the states initiative to provide clarity for developing plans, including standard of performance setting and compliance initiatives.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It would not impose substantial direct compliance costs on tribal governments that have designated facilities located in their area of Indian country. Tribes are not required to develop plans to implement the guidelines under CAA section 111(d) for designated facilities. The EPA notes that this final rule does not directly impose specific requirements on EGU sources, including those located in Indian country; before developing any standards of performance for existing sources on tribal land, the EPA would consult with leaders from affected tribes. This action also will not have substantial direct costs or impacts on the relationship between the federal government and Indian tribes or on the distribution of power and responsibilities between the federal government and Indian tribes, as

[294] *See American Trucking Ass'n* v. *EPA,* 175 F.3d 1029, 1043–45 (D.C. Cir. 1999) (NAAQS do not have significant impacts upon small entities because NAAQS themselves impose no regulations upon small entities).

specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the action.

Executive Order 13175 requires the EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' The EPA has concluded that this action does not have tribal implications as specified in E.O. 13175. It would not impose substantial direct compliance costs on tribal governments that have designated facilities located in their area of Indian country. Tribes are not required to develop plans to implement the guidelines under CAA section 111(d) for designated facilities. This action also will not have substantial direct cost or impacts on the relationship between the federal government and Indian tribes or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175.

Consistent with EPA Policy on Consultation and Coordination with Indian Tribes, the EPA consulted with tribal officials during the development of this action to provide an opportunity to have meaningful and timely input. On August 24, 2018, consultation letters were sent to 584 tribal leaders that provided information and offered consultation regarding the EPA's development of this rule. On August 30, 2018, the EPA provided a presentation overview on the Proposal: Affordable Clean Energy (Rule) on the monthly National Tribal Air Association/EPA Air Policy call. At the request of the tribes, two consultation meetings were held: One with the Navajo Nation on October 11, 2018, and one with the Samish Indian Nation on October 16, 2018. The Samish Indian Nation opened their consultation to other tribes—also participating in this meeting for informational purposes only were seven tribes (Blue Lake Rancheria, Cherokee Nation Environmental Program, La Jolla Band of Luiseño Indians, Leech Lake Band of Ojibwe, Muscogee (Creek) Nation Office of Environmental Services, Nez Perce Tribe, The Quapaw Tribe) and the National Tribal Air Association. In the meetings, the tribes were presented information from the proposal. The tribes asked general clarifying questions and indicated that they would submit formal comments. Comments on the proposal were received from the Navajo Nation, the Samish Indian Nation, Blue Lake Rancheria, Leech Lake Band of Ojibwe, Nez Perce Tribe, and the National Tribal Air Association, in addition to the Keweenaw Bay Indian Community, the Fond du Lac Band, the 1854 Treaty Authority, and the Sac and Fox Nation. Tribal commenters insisted on meaningful government-to-government consultation with potentially impacted tribes, and that the final rule require states to consult with indigenous and vulnerable communities as they develop state plans. More specific comments can be found in the docket.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is subject to Executive Order 13045 because it is an economically significant regulatory action as defined by Executive Order 12866. The EPA believes that this action will achieve CO_2 emission reductions resulting from implementation of these emission guidelines, as well as ozone and $PM_{2.5}$ emission reductions as a co-benefit, and will further improve children's health.

Moreover, this action does not affect the level of public health and environmental protection already being provided by existing NAAQS, including ozone and $PM_{2.5}$, and other mechanisms in the CAA. This action does not affect applicable local, state, or federal permitting or air quality management programs that will continue to address areas with degraded air quality and maintain the air quality in areas meeting current standards. Areas that need to reduce criteria air pollution to meet the NAAQS will still need to rely on control strategies to reduce emissions.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action, which is a significant regulatory energy action under Executive Order 12866, is likely to have a significant effect on the supply, distribution, or use of energy. Specifically, the EPA estimated in the RIA that the rule could result in more than a one percent decrease in coal production in 2025 (or a reduction of more than a 5 million tons per year) and less than a one percent reduction in natural gas use in the power sector (or more than a 25 million MCF reduction in production on an annual basis). The energy impacts the EPA estimates from these rules may be under- or over-estimates of the true energy impacts associated with this action. For more information on the estimated energy effects, please refer to the RIA for these rulemakings, which is in the public docket.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action is unlikely to have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The EPA believes that this action will achieve CO_2 emission reductions resulting from implementation of these final guidelines, as well as ozone and $PM_{2.5}$ emission reductions as a co-benefit, and will further improve environmental justice communities' health as discussed in the RIA.

With regards to the repeal, Chapter 2 of the RIA explains why the EPA believes that the power sector is already on path to achieve the CO_2 reductions required by the CPP, therefore the EPA does not believe it would have any significant impact on EJ effected communities.

With regards to ACE, as described in Chapter 4 of the RIA, the EPA finds that most of the eastern U.S. will experience PM and ozone-related benefits as a result of this action. While the EPA expects areas in the southeastern U.S. to experience a modest increase in fine particle levels, areas including the Midwest will experience reduced levels of PM, yielding significant benefits in the form of fewer premature deaths and illnesses. On balance, the positive benefits of this action significantly outweigh the estimated disbenefits.

Moreover, this action does not affect the level of public health and environmental protection already being provided by existing NAAQS, including ozone and $PM_{2.5}$, and other mechanisms in the CAA.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is a ''major rule'' as defined by 5 U.S.C. 804(2).

VI. Statutory Authority

The statutory authority for this action is provided by sections 111, 301, and 307(d)(1)(V) of the CAA, as amended (42 U.S.C. 7411, 7601, 7607(d)(1)(V)). This action is also subject to section 307(d) of the CAA (42 U.S.C. 7607(d)).

List of Subjects in 40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: June 19, 2019.

Andrew R. Wheeler,

Administrator.

Therefore, 40 CFR chapter I is amended as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Add subpart Ba to read as follows:

Subpart Ba—Adoption and Submittal of State Plans for Designated Facilities

Sec.

§ 60.20a Applicability.

(a) The provisions of this subpart apply upon publication of a final emission guideline under § 60.22a(a) if implementation of such final guideline is ongoing as of July 8, 2019 or if the final guideline is published after July 8, 2019.

(1) Each emission guideline promulgated under this part is subject to the requirements of this subpart, except that each emission guideline may include specific provisions in addition to or that supersede requirements of this subpart. Each emission guideline must identify explicitly any provision of this subpart that is superseded.

(2) Terms used throughout this part are defined in § 60.21a or in the Clean Air Act (Act) as amended in 1990, except that emission guidelines promulgated as individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 60.21a.

(b) No standard of performance or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 112, Part C or D, or any other authority of this Act), or a standard issued under State authority.

§ 60.21a Definitions.

Terms used but not defined in this subpart shall have the meaning given them in the Act and in subpart A of this part:

(a) *Designated pollutant* means any air pollutant, the emissions of which are subject to a standard of performance for new stationary sources, but for which air quality criteria have not been issued and that is not included on a list published under section 108(a) or section 112(b)(1)(A) of the Act.

(b) *Designated facility* means any existing facility (see § 60.2) which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the existing facility were an affected facility (see § 60.2).

(c) *Plan* means a plan under section 111(d) of the Act which establishes standards of performance for designated pollutants from designated facilities and provides for the implementation and enforcement of such standards of performance.

(d) *Applicable plan* means the plan, or most recent revision thereof, which has been approved under § 60.27a(b) or promulgated under § 60.27a(d).

(e) *Emission guideline* means a guideline set forth in subpart C of this part, or in a final guideline document published under § 60.22a(a), which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator has determined has been adequately demonstrated for designated facilities.

(f) *Standard of performance* means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated, including, but not limited to a legally enforceable regulation setting forth an allowable rate or limit of emissions into the atmosphere, or prescribing a design, equipment, work practice, or operational standard, or combination thereof.

(g) *Compliance schedule* means a legally enforceable schedule specifying a date or dates by which a source or category of sources must comply with specific standards of performance contained in a plan or with any increments of progress to achieve such compliance.

(h) *Increments of progress* means steps to achieve compliance which must be taken by an owner or operator of a designated facility, including:

(1) Submittal of a final control plan for the designated facility to the appropriate air pollution control agency;

(2) Awarding of contracts for emission control systems or for process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modification;

(3) Initiation of on-site construction or installation of emission control equipment or process change;

(4) Completion of on-site construction or installation of emission control equipment or process change; and

(5) Final compliance.

(i) *Region* means an air quality control region designated under section 107 of the Act and described in part 81 of this chapter.

(j) *Local agency* means any local governmental agency.

§ 60.22a Publication of emission guidelines.

(a) Concurrently upon or after proposal of standards of performance for the control of a designated pollutant from affected facilities, the Administrator will publish a draft emission guideline containing information pertinent to control of the designated pollutant from designated facilities. Notice of the availability of the draft emission guideline will be published in the **Federal Register** and public comments on its contents will be invited. After consideration of public comments and upon or after promulgation of standards of performance for control of a designated pollutant from affected facilities, a final emission guideline will be published and notice of its availability will be published in the **Federal Register**.

(b) Emission guidelines published under this section will provide information for the development of State plans, such as:

(1) Information concerning known or suspected endangerment of public health or welfare caused, or contributed to, by the designated pollutant.

(2) A description of systems of emission reduction which, in the

judgment of the Administrator, have been adequately demonstrated.

(3) Information on the degree of emission limitation which is achievable with each system, together with information on the costs, nonair quality health environmental effects, and energy requirements of applying each system to designated facilities.

(4) Incremental periods of time normally expected to be necessary for the design, installation, and startup of identified control systems.

(5) The degree of emission limitation achievable through the application of the best system of emission reduction (considering the cost of such achieving reduction and any nonair quality health and environmental impact and energy requirements) that has been adequately demonstrated for designated facilities, and the time within which compliance with standards of performance can be achieved. The Administrator may specify different degrees of emission limitation or compliance times or both for different sizes, types, and classes of designated facilities when costs of control, physical limitations, geographical location, or similar factors make subcategorization appropriate.

(6) Such other available information as the Administrator determines may contribute to the formulation of State plans.

(c) The emission guidelines and compliance times referred to in paragraph (b)(5) of this section will be proposed for comment upon publication of the draft guideline document, and after consideration of comments will be promulgated in subpart C of this part with such modifications as may be appropriate.

§ 60.23a Adoption and submittal of State plans; public hearings.

(a)(1) Unless otherwise specified in the applicable subpart, within three years after notice of the availability of a final emission guideline is published under § 60.22a(a), each State shall adopt and submit to the Administrator, in accordance with § 60.4, a plan for the control of the designated pollutant to which the emission guideline applies.

(2) At any time, each State may adopt and submit to the Administrator any plan revision necessary to meet the requirements of this subpart or an applicable subpart of this part.

(b) If no designated facility is located within a State, the State shall submit a letter of certification to that effect to the Administrator within the time specified in paragraph (a) of this section. Such certification shall exempt the State from the requirements of this subpart for that designated pollutant.

(c) The State shall, prior to the adoption of any plan or revision thereof, conduct one or more public hearings within the State on such plan or plan revision in accordance with the provisions under this section.

(d) Any hearing required by paragraph (c) of this section shall be held only after reasonable notice. Notice shall be given at least 30 days prior to the date of such hearing and shall include:

(1) Notification to the public by prominently advertising the date, time, and place of such hearing in each region affected. This requirement may be satisfied by advertisement on the internet;

(2) Availability, at the time of public announcement, of each proposed plan or revision thereof for public inspection in at least one location in each region to which it will apply. This requirement may be satisfied by posting each proposed plan or revision on the internet;

(3) Notification to the Administrator;

(4) Notification to each local air pollution control agency in each region to which the plan or revision will apply; and

(5) In the case of an interstate region, notification to any other State included in the region.

(e) The State may cancel the public hearing through a method it identifies if no request for a public hearing is received during the 30 day notification period under paragraph (d) of this section and the original notice announcing the 30 day notification period states that if no request for a public hearing is received the hearing will be cancelled; identifies the method and time for announcing that the hearing has been cancelled; and provides a contact phone number for the public to call to find out if the hearing has been cancelled.

(f) The State shall prepare and retain, for a minimum of 2 years, a record of each hearing for inspection by any interested party. The record shall contain, as a minimum, a list of witnesses together with the text of each presentation.

(g) The State shall submit with the plan or revision:

(1) Certification that each hearing required by paragraph (c) of this section was held in accordance with the notice required by paragraph (d) of this section; and

(2) A list of witnesses and their organizational affiliations, if any, appearing at the hearing and a brief written summary of each presentation or written submission.

(h) Upon written application by a State agency (through the appropriate Regional Office), the Administrator may approve State procedures designed to insure public participation in the matters for which hearings are required and public notification of the opportunity to participate if, in the judgment of the Administrator, the procedures, although different from the requirements of this subpart, in fact provide for adequate notice to and participation of the public. The Administrator may impose such conditions on his approval as he deems necessary. Procedures approved under this section shall be deemed to satisfy the requirements of this subpart regarding procedures for public hearings.

§ 60.24a Standards of performance and compliance schedules.

(a) Each plan shall include standards of performance and compliance schedules.

(b) Standards of performance shall either be based on allowable rate or limit of emissions, except when it is not feasible to prescribe or enforce a standard of performance. The EPA shall identify such cases in the emission guidelines issued under § 60.22a. Where standards of performance prescribing design, equipment, work practice, or operational standard, or combination thereof are established, the plan shall, to the degree possible, set forth the emission reductions achievable by implementation of such standards, and may permit compliance by the use of equipment determined by the State to be equivalent to that prescribed.

(1) Test methods and procedures for determining compliance with the standards of performance shall be specified in the plan. Methods other than those specified in appendix A to this part or an applicable subpart of this part may be specified in the plan if shown to be equivalent or alternative methods as defined in § 60.2.

(2) Standards of performance shall apply to all designated facilities within the State. A plan may contain standards of performance adopted by local jurisdictions provided that the standards are enforceable by the State.

(c) Except as provided in paragraph (e) of this section, standards of performance shall be no less stringent than the corresponding emission guideline(s) specified in subpart C of this part, and final compliance shall be required as expeditiously as practicable, but no later than the compliance times specified in an applicable subpart of this part.

(d) Any compliance schedule extending more than 24 months from the date required for submittal of the

plan must include legally enforceable increments of progress to achieve compliance for each designated facility or category of facilities. Unless otherwise specified in the applicable subpart, increments of progress must include, where practicable, each increment of progress specified in § 60.21a(h) and must include such additional increments of progress as may be necessary to permit close and effective supervision of progress toward final compliance.

(e) In applying a standard of performance to a particular source, the State may take into consideration factors, such as the remaining useful life of such source, provided that the State demonstrates with respect to each such facility (or class of such facilities):

(1) Unreasonable cost of control resulting from plant age, location, or basic process design;

(2) Physical impossibility of installing necessary control equipment; or

(3) Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

(f) Nothing in this subpart shall be construed to preclude any State or political subdivision thereof from adopting or enforcing:

(1) Standards of performance more stringent than emission guidelines specified in subpart C of this part or in applicable emission guidelines; or

(2) Compliance schedules requiring final compliance at earlier times than those specified in subpart C of this part or in applicable emission guidelines.

§ 60.25a Emission inventories, source surveillance, reports.

(a) Each plan shall include an inventory of all designated facilities, including emission data for the designated pollutants and information related to emissions as specified in appendix D to this part. Such data shall be summarized in the plan, and emission rates of designated pollutants from designated facilities shall be correlated with applicable standards of performance. As used in this subpart, ''correlated'' means presented in such a manner as to show the relationship between measured or estimated amounts of emissions and the amounts of such emissions allowable under applicable standards of performance.

(b) Each plan shall provide for monitoring the status of compliance with applicable standards of performance. Each plan shall, as a minimum, provide for:

(1) Legally enforceable procedures for requiring owners or operators of designated facilities to maintain records and periodically report to the State information on the nature and amount of emissions from such facilities, and/or such other information as may be necessary to enable the State to determine whether such facilities are in compliance with applicable portions of the plan. Submission of electronic documents shall comply with the requirements of 40 CFR part 3 (Electronic reporting).

(2) Periodic inspection and, when applicable, testing of designated facilities.

(c) Each plan shall provide that information obtained by the State under paragraph (b) of this section shall be correlated with applicable standards of performance (see § 60.25a(a)) and made available to the general public.

(d) The provisions referred to in paragraphs (b) and (c) of this section shall be specifically identified. Copies of such provisions shall be submitted with the plan unless:

(1) They have been approved as portions of a preceding plan submitted under this subpart or as portions of an implementation plan submitted under section 110 of the Act; and

(2) The State demonstrates:

(i) That the provisions are applicable to the designated pollutant(s) for which the plan is submitted, and

(ii) That the requirements of § 60.26a are met.

(e) The State shall submit reports on progress in plan enforcement to the Administrator on an annual (calendar year) basis, commencing with the first full report period after approval of a plan or after promulgation of a plan by the Administrator. Information required under this paragraph must be included in the annual report required by § 51.321 of this chapter.

(f) Each progress report shall include:

(1) Enforcement actions initiated against designated facilities during the reporting period, under any standard of performance or compliance schedule of the plan.

(2) Identification of the achievement of any increment of progress required by the applicable plan during the reporting period.

(3) Identification of designated facilities that have ceased operation during the reporting period.

(4) Submission of emission inventory data as described in paragraph (a) of this section for designated facilities that were not in operation at the time of plan development but began operation during the reporting period.

(5) Submission of additional data as necessary to update the information submitted under paragraph (a) of this section or in previous progress reports.

(6) Submission of copies of technical reports on all performance testing on designated facilities conducted under paragraph (b)(2) of this section, complete with concurrently recorded process data.

§ 60.26a Legal authority.

(a) Each plan or plan revision shall show that the State has legal authority to carry out the plan or plan revision, including authority to:

(1) Adopt standards of performance and compliance schedules applicable to designated facilities.

(2) Enforce applicable laws, regulations, standards, and compliance schedules, and seek injunctive relief.

(3) Obtain information necessary to determine whether designated facilities are in compliance with applicable laws, regulations, standards, and compliance schedules, including authority to require recordkeeping and to make inspections and conduct tests of designated facilities.

(4) Require owners or operators of designated facilities to install, maintain, and use emission monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such facilities; also authority for the State to make such data available to the public as reported and as correlated with applicable standards of performance.

(b) The provisions of law or regulations which the State determines provide the authorities required by this section shall be specifically identified. Copies of such laws or regulations shall be submitted with the plan unless:

(1) They have been approved as portions of a preceding plan submitted under this subpart or as portions of an implementation plan submitted under section 110 of the Act; and

(2) The State demonstrates that the laws or regulations are applicable to the designated pollutant(s) for which the plan is submitted.

(c) The plan shall show that the legal authorities specified in this section are available to the State at the time of submission of the plan. Legal authority adequate to meet the requirements of paragraphs (a)(3) and (4) of this section may be delegated to the State under section 114 of the Act.

(d) A State governmental agency other than the State air pollution control agency may be assigned responsibility for carrying out a portion of a plan if the plan demonstrates to the Administrator's satisfaction that the State governmental agency has the legal

authority necessary to carry out that portion of the plan.

(e) The State may authorize a local agency to carry out a plan, or portion thereof, within the local agency's jurisdiction if the plan demonstrates to the Administrator's satisfaction that the local agency has the legal authority necessary to implement the plan or portion thereof, and that the authorization does not relieve the State of responsibility under the Act for carrying out the plan or portion thereof.

§ 60.27a Actions by the Administrator.

(a) The Administrator may, whenever he determines necessary, shorten the period for submission of any plan or plan revision or portion thereof.

(b) After determination that a plan or plan revision is complete per the requirements of § 60.27a(g), the Administrator will take action on the plan or revision. The Administrator will, within twelve months of finding that a plan or plan revision is complete, approve or disapprove such plan or revision or each portion thereof.

(c) The Administrator will promulgate, through notice-and-comment rulemaking, a federal plan, or portion thereof, at any time within two years after the Administrator:

(1) Finds that a State fails to submit a required plan or plan revision or finds that the plan or plan revision does not satisfy the minimum criteria under paragraph (g) of this section; or

(2) Disapproves the required State plan or plan revision or any portion thereof, as unsatisfactory because the applicable requirements of this subpart or an applicable subpart under this part have not been met.

(d) The Administrator will promulgate a final federal plan as described in paragraph (c) of this section unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such federal plan.

(e)(1) Except as provided in paragraph (e)(2) of this section, a federal plan promulgated by the Administrator under this section will prescribe standards of performance of the same stringency as the corresponding emission guideline(s) specified in the final emission guideline published under § 60.22a(a) and will require compliance with such standards as expeditiously as practicable but no later than the times specified in the emission guideline.

(2) Upon application by the owner or operator of a designated facility to which regulations proposed and promulgated under this section will apply, the Administrator may provide for the application of less stringent standards of performance or longer compliance schedules than those otherwise required by this section in accordance with the criteria specified in § 60.24a(e).

(f) Prior to promulgation of a federal plan under paragraph (d) of this section, the Administrator will provide the opportunity for at least one public hearing in either:

(1) Each State that failed to submit a required complete plan or plan revision, or whose required plan or plan revision is disapproved by the Administrator; or

(2) Washington, DC or an alternate location specified in the **Federal Register**.

(g) Each plan or plan revision that is submitted to the Administrator shall be reviewed for completeness as described in paragraphs (g)(1) through (3) of this section.

(1) *General.* Within 60 days of the Administrator's receipt of a state submission, but no later than 6 months after the date, if any, by which a State is required to submit the plan or revision, the Administrator shall determine whether the minimum criteria for completeness have been met. Any plan or plan revision that a State submits to the EPA, and that has not been determined by the EPA by the date 6 months after receipt of the submission to have failed to meet the minimum criteria, shall on that date be deemed by operation of law to meet such minimum criteria. Where the Administrator determines that a plan submission does not meet the minimum criteria of this paragraph, the State will be treated as not having made the submission and the requirements of § 60.27a regarding promulgation of a federal plan shall apply.

(2) *Administrative criteria.* In order to be deemed complete, a State plan must contain each of the following administrative criteria:

(i) A formal letter of submittal from the Governor or her designee requesting EPA approval of the plan or revision thereof;

(ii) Evidence that the State has adopted the plan in the state code or body of regulations; or issued the permit, order, consent agreement (hereafter ''document'') in final form. That evidence must include the date of adoption or final issuance as well as the effective date of the plan, if different from the adoption/issuance date;

(iii) Evidence that the State has the necessary legal authority under state law to adopt and implement the plan;

(iv) A copy of the actual regulation, or document submitted for approval and incorporation by reference into the plan, including indication of the changes made (such as redline/strikethrough) to the existing approved plan, where applicable. The submittal must be a copy of the official state regulation or document signed, stamped and dated by the appropriate state official indicating that it is fully enforceable by the State. The effective date of the regulation or document must, whenever possible, be indicated in the document itself. The State's electronic copy must be an exact duplicate of the hard copy. If the regulation/document provided by the State for approval and incorporation by reference into the plan is a copy of an existing publication, the State submission should, whenever possible, include a copy of the publication cover page and table of contents;

(v) Evidence that the State followed all of the procedural requirements of the state's laws and constitution in conducting and completing the adoption and issuance of the plan;

(vi) Evidence that public notice was given of the proposed change with procedures consistent with the requirements of § 60.23a, including the date of publication of such notice;

(vii) Certification that public hearing(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable and consistent with the public hearing requirements in § 60.23a;

(viii) Compilation of public comments and the State's response thereto; and

(ix) Such other criteria for completeness as may be specified by the Administrator under the applicable emission guidelines.

(3) *Technical criteria.* In order to be deemed complete, a State plan must contain each of the following technical criteria:

(i) Description of the plan approach and geographic scope;

(ii) Identification of each designated facility, identification of standards of performance for the designated facilities, and monitoring, recordkeeping and reporting requirements that will determine compliance by each designated facility;

(iii) Identification of compliance schedules and/or increments of progress;

(iv) Demonstration that the State plan submittal is projected to achieve emissions performance under the applicable emission guidelines;

(v) Documentation of state recordkeeping and reporting requirements to determine the performance of the plan as a whole; and

(vi) Demonstration that each emission standard is quantifiable, non-duplicative, permanent, verifiable, and enforceable.

§ 60.28a Plan revisions by the State.

(a) Any revision to a state plan shall be adopted by such State after reasonable notice and public hearing. For plan revisions required in response to a revised emission guideline, such plan revisions shall be submitted to the Administrator within three years, or shorter if required by the Administrator, after notice of the availability of a final revised emission guideline is published under § 60.22a. All plan revisions must be submitted in accordance with the procedures and requirements applicable to development and submission of the original plan.

(b) A revision of a plan, or any portion thereof, shall not be considered part of an applicable plan until approved by the Administrator in accordance with this subpart.

§ 60.29a Plan revisions by the Administrator.

After notice and opportunity for public hearing in each affected State, the Administrator may revise any provision of an applicable federal plan if:

(a) The provision was promulgated by the Administrator; and

(b) The plan, as revised, will be consistent with the Act and with the requirements of this subpart.

Subpart UUUU [Removed]

■ 3. Remove subpart UUUU.

■ 4. Add subpart UUUUa to read as follows:

Subpart UUUUa—Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units

Introduction

Sec.

Introduction

§ 60.5700a What is the purpose of this subpart?

This subpart establishes emission guidelines and approval criteria for State plans that establish standards of performance limiting greenhouse gas (GHG) emissions from an affected steam generating unit. An affected steam generating unit for the purposes of this subpart, is referred to as a designated facility. These emission guidelines are developed in accordance with section 111(d) of the Clean Air Act and subpart Ba of this part. To the extent any requirement of this subpart is inconsistent with the requirements of subpart A or Ba of this part, the requirements of this subpart will apply.

§ 60.5705a Which pollutants are regulated by this subpart?

(a) The pollutants regulated by this subpart are greenhouse gases. The emission guidelines for greenhouse gases established in this subpart are heat rate improvements which target achieving lower carbon dioxide (CO_2) emission rates at designated facilities.

(b) PSD and Title V Thresholds for Greenhouse Gases.

(1) For the purposes of § 51.166(b)(49)(ii) of this chapter, with respect to GHG emissions from facilities, the ''pollutant that is subject to the standard promulgated under section 111 of the Act'' shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in § 51.166(b)(48) of this chapter and in any State Implementation Plan (SIP) approved by the EPA that is interpreted to incorporate, or specifically incorporates, § 51.166(b)(48) of this chapter.

(2) For the purposes of § 52.21(b)(50)(ii) of this chapter, with respect to GHG emissions from facilities regulated in the plan, the ''pollutant that is subject to the standard promulgated under section 111 of the Act'' shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in § 52.21(b)(49) of this chapter.

(3) For the purposes of § 70.2 of this chapter, with respect to greenhouse gas emissions from facilities regulated in the plan, the ''pollutant that is subject to any standard promulgated under section 111 of the Act'' shall be considered to be the pollutant that otherwise is ''subject to regulation'' as defined in § 70.2 of this chapter.

(4) For the purposes of § 71.2 of this chapter, with respect to greenhouse gas emissions from facilities regulated in the plan, the ''pollutant that is subject to any standard promulgated under section 111 of the Act'' shall be considered to be the pollutant that otherwise is ''subject to regulation'' as defined in § 71.2 of this chapter.

§ 60.5710a Am I affected by this subpart?

If you are the Governor of a State in the contiguous United States with one or more designated facilities that commenced construction on or before January 8, 2014, you are subject to this action and you must submit a State plan to the U.S. Environmental Protection Agency (EPA) that implements the emission guidelines contained in this subpart. If you are the Governor of a State in the contiguous United States with no designated facilities for which construction commenced on or before January 8, 2014, in your State, you must submit a negative declaration letter in place of the State plan.

§ 60.5715a What is the review and approval process for my plan?

The EPA will review your plan according to § 60.27a to approve or disapprove such plan or revision or each portion thereof.

§ 60.5720a What if I do not submit a plan, my plan is incomplete, or my plan is not approvable?

(a) If you do not submit a complete or an approvable plan the EPA will

develop a Federal plan for your State according to § 60.27a. The Federal plan will implement the emission guidelines contained in this subpart. Owners and operators of designated facilities not covered by an approved plan must comply with a Federal plan implemented by the EPA for the State.

(b) After a Federal plan has been implemented in your State, it will be withdrawn when your State submits, and the EPA approves, a plan.

§ 60.5725a In lieu of a State plan submittal, are there other acceptable option(s) for a State to meet its CAA section 111(d) obligations?

A State may meet its CAA section 111(d) obligations only by submitting a State plan submittal or a negative declaration letter (if applicable).

§ 60.5730a Is there an approval process for a negative declaration letter?

The EPA has no formal review process for negative declaration letters. Once your negative declaration letter has been received, the EPA will place a copy in the public docket and publish a notice in the **Federal Register**. If, at a later date, a designated facility for which construction commenced on or before January 8, 2014 is found in your State, you will be found to have failed to submit a plan as required, and a Federal plan implementing the emission guidelines contained in this subpart, when promulgated by the EPA, will apply to that designated facility until you submit, and the EPA approves, a State plan.

State Plan Requirements

§ 60.5735a What must I include in my federally enforceable State plan?

(a) You must include the components described in paragraphs (a)(1) through (4) of this section in your plan submittal. The final plan must meet the requirements of, and include the information required under, § 60.5740a.

(1) *Identification of designated facilities.* Consistent with § 60.25a(a), you must identify the designated facilities covered by your plan and all designated facilities in your State that meet the applicability criteria in § 60.5775a. In addition, you must include an inventory of CO_2 emissions from the designated facilities during the most recent calendar year for which data is available prior to the submission of the plan.

(2) *Standards of performance.* You must provide a standard of performance for each designated facility according to § 60.5755a and compliance periods for each standard of performance according to § 60.5750a. Each standard of performance must reflect the degree of emission limitation achievable through application of the heat rate improvements described in § 60.5740a. In applying the heat rate improvements described in § 60.5740a, a state may consider remaining useful life and other factors, as provided for in § 60.24a(e).

(3) *Identification of applicable monitoring, reporting, and recordkeeping requirements for each designated facility.* You must include in your plan all applicable monitoring, reporting and recordkeeping requirements for each designated facility and the requirements must be consistent with or no less stringent than the requirements specified in § 60.5785a.

(4) *State reporting.* Your plan must include a description of the process, contents, and schedule for State reporting to the EPA about plan implementation and progress, including information required under § 60.5795a.

(b) You must follow the requirements of subpart Ba of this part and demonstrate that they were met in your State plan.

§ 60.5740a What must I include in my plan submittal?

(a) In addition to the components of the plan listed in § 60.5735a, a state plan submittal to the EPA must include the information in paragraphs (a)(1) through (8) of this section. This information must be submitted to the EPA as part of your plan submittal but will not be codified as part of the federally enforceable plan upon approval by EPA.

(1) You must include a summary of how you determined each standard of performance for each designated facility according to § 60.5755a(a). You must include in the summary an evaluation of the applicability of each of the following heat rate improvements to each designated facility:

(i) Neural network/intelligent sootblowers;

(ii) Boiler feed pumps;

(iii) Air heater and duct leakage control;

(iv) Variable frequency drives;

(v) Blade path upgrades for steam turbines;

(vi) Redesign or replacement of economizer; and

(vii) Improved operating and maintenance practices.

(2)(i) As part of the summary under paragraph (a)(1) of this section regarding the applicability of each heat rate improvement to each designated facility, you must include an evaluation of the following degree of emission limitation achievable through application of the heat rate improvements:

TABLE 1 TO PARAGRAPH (A)(2)(I)—MOST IMPACTFUL HRI MEASURES AND RANGE OF THEIR HRI POTENTIAL (%) BY EGU SIZE

HRI Measure	< 200 MW		200–500 MW		>500 MW	
	Min	Max	Min	Max	Min	Max
Neural Network/Intelligent Sootblowers	0.5	1.4	0.3	1.0	0.3	0.9
Boiler Feed Pumps	0.2	0.5	0.2	0.5	0.2	0.5
Air Heater & Duct Leakage Control	0.1	0.4	0.1	0.4	0.1	0.4
Variable Frequency Drives	0.2	0.9	0.2	1.0	0.2	1.0
Blade Path Upgrade (Steam Turbine)	0.9	2.7	1.0	2.9	1.0	2.9
Redesign/Replace Economizer	0.5	0.9	0.5	1.0	0.5	1.0
Improved Operating and Maintenance (O&M) Practices	Can range from 0 to > 2.0% depending on the unit's historical O&M practices.					

(ii) In applying a standard of performance, if you consider remaining useful life and other factors for a designated facility as provided in § 60.24a(e), you must include a summary of the application of the relevant factors in deriving a standard of performance.

(3) You must include a demonstration that each designated facility's standard of performance is quantifiable,

permanent, verifiable, and enforceable according to § 60.5755a.

(4) Your plan demonstration must include the information listed in paragraphs (a)(4)(i) through (v) of this section as applicable.

(i) A summary of each designated facility's anticipated future operation characteristics, including:

(A) Annual generation;

(B) CO_2 emissions;

(C) Fuel use, fuel prices, fuel carbon content;

(D) Fixed and variable operations and maintenance costs;

(E) Heat rates; and

(F) Electric generation capacity and capacity factors.

(ii) A timeline for implementation.

(iii) All wholesale electricity prices.

(iv) A time period of analysis, which must extend through at least 2035.

(v) A demonstration that each standard of performance included in your plan meets the requirements of § 60.5755a.

(5) Your plan submittal must include certification that a hearing required under § 60.23a(c)on the State plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission, pursuant to the requirements of § 60.23a(g).

(6) Your plan submittal must include supporting material for your plan including:

(i) Materials demonstrating the State's legal authority to implement and enforce each component of its plan, including standards of performance, pursuant to the requirements of §§ 60.26a and 60.5740a(a)(6);

(ii) Materials supporting calculations for designated facility's standards of performance according to § 60.5755a; and

(iii) Any other materials necessary to support evaluation of the plan by the EPA.

(b) You must submit your final plan to the EPA according to § 60.5800a.

§ 60.5745a What are the timing requirements for submitting my plan?

You must submit a plan with the information required under § 60.5740a by July 8, 2022.

§ 60.5750a What schedules and compliance periods must I include in my plan?

The EPA is superseding the requirement at § 60.22a(b)(5) for EPA to provide compliance timelines in the emission guidelines. Each standard of performance for designated facilities regulated under the plan must include a compliance period that ensures the standard of performance reflects the degree of emission limitation achievable though application of the heat rate improvements used to calculate the standard. The schedules and compliance periods included in a plan must follow the requirements of § 60.24a.

§ 60.5755a What standards of performance must I include in my plan?

(a) You must set a standard of performance for each designated facility within the state.

(1) The standard of performance must be an emission performance rate relating mass of CO_2 emitted per unit of energy (*e.g.* pounds of CO_2 emitted per MWh).

(2) In establishing any standard of performance, you must consider the applicability of each of the heat rate improvements and associated degree of emission limitation achievable included in § 60.5740a(a)(1) and (2) to the designated facility. You must include a demonstration in your plan submission for how you considered each heat rate improvement and associated degree of emission limitation achievable in calculating each standard of performance.

(i) In applying a standard of performance to any designated facility, you may consider the source-specific factors included in § 60.24a(e).

(ii) If you consider source-specific factors to apply a standard of performance, you must include a demonstration in your plan submission for how you considered such factors.

(b) Standards of performance for designated facilities included under your plan must be demonstrated to be quantifiable, verifiable, permanent, and enforceable with respect to each designated facility. The plan submittal must include the methods by which each standard of performance meets each of the requirements in paragraphs (c) through (f) of this section.

(c) A designated facility's standard of performance is quantifiable if it can be reliably measured in a manner that can be replicated.

(d) A designated facility's standard of performance is verifiable if adequate monitoring, recordkeeping and reporting requirements are in place to enable the State and the Administrator to independently evaluate, measure, and verify compliance with the standard of performance.

(e) A designated facility's standard of performance is permanent if the standard of performance must be met for each compliance period, unless it is replaced by another standard of performance in an approved plan revision.

(f) A designated facility's standard of performance is enforceable if:

(1) A technically accurate limitation or requirement and the time period for the limitation or requirement are specified;

(2) Compliance requirements are clearly defined;

(3) The designated facility responsible for compliance and liable for violations can be identified;

(4) Each compliance activity or measure is enforceable as a practical matter; and

(5) The Administrator, the State, and third parties maintain the ability to enforce against violations (including if a designated facility does not meet its standard of performance based on its emissions) and secure appropriate corrective actions, in the case of the Administrator pursuant to CAA sections 113(a) through (h), in the case of a State, pursuant to its plan, State law or CAA section 304, as applicable, and in the case of third parties, pursuant to CAA section 304.

§ 60.5760a What is the procedure for revising my plan?

EPA-approved plans can be revised only with approval by the Administrator. The Administrator will approve a plan revision if it is satisfactory with respect to the applicable requirements of this subpart and any applicable requirements of subpart Ba of this part, including the requirements in § 60.5740a. If one (or more) of the elements of the plan set in § 60.5735a require revision, a request must be submitted to the Administrator indicating the proposed revisions to the plan.

§ 60.5765a What must I do to meet my plan obligations?

To meet your plan obligations, you must demonstrate that your designated facilities are complying with their standards of performance as specified in § 60.5755a.

Applicability of Plans to Designated Facilities

§ 60.5770a Does this subpart directly affect EGU owners or operators in my State?

(a) This subpart does not directly affect EGU owners or operators in your State. However, designated facility owners or operators must comply with the plan that a State develops to implement the emission guidelines contained in this subpart.

(b) If a State does not submit a plan to implement and enforce the emission

guidelines contained in this subpart by July 8, 2022, or the date that EPA disapproves a final plan, the EPA will implement and enforce a Federal plan, as provided in § 60.27a(c), applicable to each designated facility within the State that commenced construction on or before January 8, 2014.

§ 60.5775a What designated facilities must I address in my State plan?

(a) The EGUs that must be addressed by your plan are any designated facility that commenced construction on or before January 8, 2014.

(b) A designated facility is a steam generating unit that meets the relevant applicability conditions specified in paragraphs (b)(1) through (3) of this section, as applicable, of this section except as provided in § 60.5780a.

(1) Serves a generator connected to a utility power distribution system with a nameplate capacity greater than 25 MW-net (*i.e.,* capable of selling greater than 25 MW of electricity).

(2) Has a base load rating (*i.e.,* design heat input capacity) greater than 260 GJ/hr (250 MMBtu/hr) heat input of fossil fuel (either alone or in combination with any other fuel).

(3) Is an electric utility steam generating unit that burns coal for more than 10.0 percent of the average annual heat input during the 3 previous calendar years.

§ 60.5780a What EGUs are excluded from being designated facilities?

(a) An EGU that is excluded from being a designated facility is:

(1) An EGU that is subject to subpart TTTT of this part as a result of commencing construction, reconstruction or modification after the subpart TTTT applicability date;

(2) A steam generating unit that is subject to a federally enforceable permit limiting annual net-electric sales to one-third or less of its potential electric output, or 219,000 MWh or less;

(3) A stationary combustion turbine that meets the definition of a simple cycle stationary combustion turbine, a combined cycle stationary combustion turbine, or a combined heat and power combustion turbine;

(4) An IGCC unit;

(5) A non-fossil unit (*i.e.,* a unit that is capable of combusting 50 percent or more non-fossil fuel) that has always limited the use of fossil fuels to 10 percent or less of the annual capacity factor or is subject to a federally enforceable permit limiting fossil fuel use to 10 percent or less of the annual capacity factor;

(6) An EGU that serves a generator along with other steam generating unit(s), IGCC(s), or stationary combustion turbine(s) where the effective generation capacity (determined based on a prorated output of the base load rating of each steam generating unit, IGCC, or stationary combustion turbine) is 25 MW or less;

(7) An EGU that is a municipal waste combustor unit that is subject to subpart Eb of this part;

(8) An EGU that is a commercial or industrial solid waste incineration unit that is subject to subpart CCCC of this part; or

(9) A steam generating unit that fires more than 50 percent non-fossil fuels.

(b) [Reserved]

§ 60.5785a What applicable monitoring, recordkeeping, and reporting requirements do I need to include in my plan for designated facilities?

(a) Your plan must include monitoring, recordkeeping, and reporting requirements for designated facilities. To satisfy this requirement, you have the option of either:

(1) Specifying that sources must report emission and electricity generation data according to part 75 of this chapter; or

(2) Including an alternative monitoring, recordkeeping, and reporting program that includes specifications for the following program elements:

(i) Monitoring plans that specify the monitoring methods, systems, and formulas that will be used to measure CO_2 emissions;

(ii) Monitoring methods to continuously and accurately measure all CO_2 emissions, CO_2 emission rates, and other data necessary to determine compliance or assure data quality;

(iii) Quality assurance test requirements to ensure monitoring systems provide reliable and accurate data for assessing and verifying compliance;

(iv) Recordkeeping requirements;

(v) Electronic reporting procedures and systems; and

(vi) Data validation procedures for ensuring data are complete and calculated consistent with program rules, including procedures for determining substitute data in instances where required data would otherwise be incomplete.

(b) [Reserved]

Recordkeeping and Reporting Requirements

§ 60.5790a What are my recordkeeping requirements?

(a) You must keep records of all information relied upon in support of any demonstration of plan components, plan requirements, supporting documentation, and the status of meeting the plan requirements defined in the plan. After the effective date of the plan, States must keep records of all information relied upon in support of any continued demonstration that the final standards of performance are being achieved.

(b) You must keep records of all data submitted by the owner or operator of each designated facility that is used to determine compliance with each designated facility emissions standard or requirements in an approved State plan, consistent with the designated facility requirements listed in § 60.5785a.

(c) If your State has a requirement for all hourly CO_2 emissions and generation information to be used to calculate compliance with an annual emissions standard for designated facilities, any information that is submitted by the owners or operators of designated facilities to the EPA electronically pursuant to requirements in part 75 of this chapter meets the recordkeeping requirement of this section and you are not required to keep records of information that would be in duplicate of paragraph (b) of this section.

(d) You must keep records at a minimum for 5 years from the date the record is used to determine compliance with a standard of performance or plan requirement. Each record must be in a form suitable and readily available for expeditious review.

§ 60.5795a What are my reporting and notification requirements?

You must submit an annual report as required under § 60.25a(e) and (f).

§ 60.5800a How do I submit information required by these Emission Guidelines to the EPA?

(a) You must submit to the EPA the information required by these emission guidelines following the procedures in paragraphs (b) through (e) of this section unless you submit through the procedure described in paragraph (f) of this section.

(b) All negative declarations, State plan submittals, supporting materials that are part of a State plan submittal, any plan revisions, and all State reports required to be submitted to the EPA by the State plan may be reported through EPA's electronic reporting system to be named and made available at a later date.

(c) Only a submittal by the Governor or the Governor's designee by an electronic submission through SPeCS shall be considered an official submittal to the EPA under this subpart. If the

Governor wishes to designate another responsible official the authority to submit a State plan, the EPA must be notified via letter from the Governor prior to the July 8, 2022, deadline for plan submittal so that the official will have the ability to submit a plan in the SPeCS. If the Governor has previously delegated authority to make CAA submittals on the Governor's behalf, a State may submit documentation of the delegation in lieu of a letter from the Governor. The letter or documentation must identify the designee to whom authority is being designated and must include the name and contact information for the designee and also identify the State plan preparers who will need access to the EPA electronic reporting system. A State may also submit the names of the State plan preparers via a separate letter prior to the designation letter from the Governor in order to expedite the State plan administrative process. Required contact information for the designee and preparers includes the person's title, organization, and email address.

(d) The submission of the information by the authorized official must be in a non-editable format. In addition to the non-editable version all plan components designated as federally enforceable must also be submitted in an editable version.

(e) You must provide the EPA with non-editable and editable copies of any submitted revision to existing approved federally enforceable plan components. The editable copy of any such submitted plan revision must indicate the changes made at the State level, if any, to the existing approved federally enforceable plan components, using a mechanism such as redline/strikethrough. These changes are not part of the State plan until formal approval by EPA.

(f) If, in lieu of the requirements described in paragraphs (b) through (e) of this section, you choose to submit a paper copy or an electronic version by other means you must confer with your EPA Regional Office regarding the additional guidelines for submitting your plan.

Definitions

§ 60.5805a What definitions apply to this subpart?

As used in this subpart, all terms not defined herein will have the meaning given them in the Clean Air Act and in subparts TTTT, A, and Ba of this part.

Air Heater means a device that recovers heat from the flue gas for use in pre-heating the incoming combustion air and potentially for other uses such as coal drying.

Annual capacity factor means the ratio between the actual heat input to an EGU during a calendar year and the potential heat input to the EGU had it been operated for 8,760 hours during a calendar year at the base load rating.

Base load rating means the maximum amount of heat input (fuel) that an EGU can combust on a steady-state basis, as determined by the physical design and characteristics of the EGU at ISO conditions.

Boiler feed pump (or *boiler feedwater pump*) means a device used to pump feedwater into a steam boiler at an EGU. The water may be either freshly supplied or returning condensate produced from condensing steam produced by the boiler.

CO_2 emission rate means for a designated facility, the reported CO_2 emission rate of a designated facility used by a designated facility to demonstrate compliance with its CO_2 standard of performance.

Combined cycle unit means an electric generating unit that uses a stationary combustion turbine from which the heat from the turbine exhaust gases is recovered by a heat recovery steam generating unit to generate additional electricity.

Combined heat and power unit or *CHP unit* (also known as ''cogeneration'') means an electric generating unit that uses a steam-generating unit or stationary combustion turbine to simultaneously produce both electric (or mechanical) and useful thermal output from the same primary energy source.

Compliance period means a discrete time period for a designated facility to comply with a standard of performance.

Designated facility means a steam generating unit that meets the relevant applicability conditions in section § 60.5775a, except as provided in § 60.5780a.

Economizer means a heat exchange device used to capture waste heat from boiler flue gas which is then used to heat the boiler feedwater.

Fossil fuel means natural gas, petroleum, coal, and any form of solid fuel, liquid fuel, or gaseous fuel derived from such material to create useful heat.

Integrated gasification combined cycle facility or *IGCC* means a combined cycle facility that is designed to burn fuels containing 50 percent (by heat input) or more solid-derived fuel not meeting the definition of natural gas plus any integrated equipment that provides electricity or useful thermal output to either the affected facility or auxiliary equipment. The Administrator may waive the 50 percent solid-derived fuel requirement during periods of the gasification system construction, startup and commissioning, shutdown, or repair. No solid fuel is directly burned in the unit during operation.

Intelligent sootblower means an automated system that use process measurements to monitor the heat transfer performance and strategically allocate steam to specific areas to remove ash buildup at a steam generating unit.

ISO conditions means 288 Kelvin (15 °C), 60 percent relative humidity and 101.3 kilopascals pressure.

Nameplate capacity means, starting from the initial installation, the maximum electrical generating output that a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer is capable of producing (in MWe, rounded to the nearest tenth) on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the equipment, or starting from the completion of any subsequent physical change resulting in an increase in the maximum electrical generating output that the equipment is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion as specified by the person conducting the physical change.

Natural gas means a fluid mixture of hydrocarbons (*e.g.,* methane, ethane, or propane), composed of at least 70 percent methane by volume or that has a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot), that maintains a gaseous State under ISO conditions. In addition, natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Finally, natural gas does not include the following gaseous fuels: Landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Net electric output means the amount of gross generation the generator(s) produce (including, but not limited to, output from steam turbine(s), combustion turbine(s), and gas expander(s)), as measured at the generator terminals, less the electricity used to operate the plant (*i.e.,* auxiliary loads); such uses include fuel handling equipment, pumps, fans, pollution

control equipment, other electricity needs, and transformer losses as measured at the transmission side of the step up transformer (*e.g.,* the point of sale).

Net energy output means:

(1) The net electric or mechanical output from the affected facility, plus 100 percent of the useful thermal output measured relative to SATP conditions that is not used to generate additional electric or mechanical output or to enhance the performance of the unit (*e.g.,* steam delivered to an industrial process for a heating application).

(2) For combined heat and power facilities where at least 20.0 percent of the total gross or net energy output consists of electric or direct mechanical output and at least 20.0 percent of the total gross or net energy output consists of useful thermal output on a 12-operating month rolling average basis, the net electric or mechanical output from the designated facility divided by 0.95, plus 100 percent of the useful thermal output; (*e.g.,* steam delivered to an industrial process for a heating application).

Neural network means a computer model that can be used to optimize combustion conditions, steam temperatures, and air pollution at steam generating unit.

Simple cycle combustion turbine means any stationary combustion turbine which does not recover heat from the combustion turbine engine exhaust gases for purposes other than enhancing the performance of the stationary combustion turbine itself.

Standard ambient temperature and pressure (SATP) conditions means 298.15 Kelvin (25 °C, 77 °F) and 100.0 kilopascals (14.504 psi, 0.987 atm) pressure. The enthalpy of water at SATP conditions is 50 Btu/lb.

State agent means an entity acting on behalf of the State, with the legal authority of the State.

Stationary combustion turbine means all equipment, including but not limited to the turbine engine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, fuel compressor, heater, and/or pump, post-combustion emissions control technology, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine based system plus any integrated equipment that provides electricity or useful thermal output to the combustion turbine engine, heat recovery system or auxiliary equipment. Stationary means that the combustion turbine is not self-propelled or intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability. If a stationary combustion turbine burns any solid fuel directly it is considered a steam generating unit.

Steam generating unit means any furnace, boiler, or other device used for combusting fuel and producing steam (nuclear steam generators are not included) plus any integrated equipment that provides electricity or useful thermal output to the affected facility or auxiliary equipment.

Useful thermal output means the thermal energy made available for use in any heating application (*e.g.,* steam delivered to an industrial process for a heating application, including thermal cooling applications) that is not used for electric generation, mechanical output at the designated facility, to directly enhance the performance of the designated facility (*e.g.,* economizer output is not useful thermal output, but thermal energy used to reduce fuel moisture is considered useful thermal output), or to supply energy to a pollution control device at the designated facility. Useful thermal output for designated facility(s) with no condensate return (or other thermal energy input to the designated facility(s)) or where measuring the energy in the condensate (or other thermal energy input to the designated facility(s)) would not meaningfully impact the emission rate calculation is measured against the energy in the thermal output at SATP conditions. Designated facility(s) with meaningful energy in the condensate return (or other thermal energy input to the designated facility) must measure the energy in the condensate and subtract that energy relative to SATP conditions from the measured thermal output.

Variable frequency drive means an adjustable-speed drive used on induced draft fans and boiler feed pumps to control motor speed and torque by varying motor input frequency and voltage.

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requirements of § 23.863(a) through (d), amendment 23–34.

(6) No corrosive fluids or gases that may escape from any rechargeable lithium battery, may damage surrounding structure or any adjacent systems, equipment, electrical wiring, or the airplane in such a way as to cause a major or more severe failure condition, in accordance with § 23.1309, amendment 23–62, and applicable regulatory guidance.

(7) Each rechargeable lithium battery installation must have provisions to prevent any hazardous effect on structure or essential systems that may be caused by the maximum amount of heat the battery can generate during a short circuit of the battery or of its individual cells.

(8) Rechargeable lithium battery installations must have a system to automatically control the charging rate of the battery to prevent battery overheating and overcharging, and either:

i. A battery temperature sensing and over-temperature warning system with a means for automatically disconnecting the battery from its charging source in the event of an over-temperature condition; or

ii. A battery failure sensing and warning system with a means for automatically disconnecting the battery from its charging source in the event of battery failure.

(9) Any rechargeable lithium battery installation, the function of which is required for safe operation of the aircraft, must incorporate a monitoring and warning feature that will provide an indication to the appropriate flight crewmembers whenever the state of charge of the batteries has fallen below levels considered acceptable for dispatch of the aircraft.

Note 1 to paragraph (9): Reference § 23.1353(h) for dispatch consideration.

(10) The Instructions for Continued Airworthiness (ICA) required by § 23.1529 must contain maintenance requirements to assure that the battery has been sufficiently charged at appropriate intervals specified by the battery manufacturer and the equipment manufacturer that contain the rechargeable lithium battery or rechargeable lithium battery system. The lithium rechargeable batteries and lithium rechargeable battery systems must not degrade below specified ampere-hour levels sufficient to power the aircraft system. The ICA must also contain procedures for the maintenance of replacement batteries to prevent the installation of batteries that have degraded charge retention ability or other damage due to prolonged storage at a low state of charge. Replacement batteries must be of the same manufacturer and part number as approved by the FAA.

Note 2 to paragraph (10): Maintenance requirements include procedures that check battery capacity, charge degradation at manufacturers recommended inspection intervals, and replace batteries at manufacturer's recommended replacement schedule/time to prevent age-related degradation.

Note 3 to paragraph (10): The term ''sufficiently charged'' means that the battery must retain enough charge, expressed in ampere-hours, to ensure that the battery cells will not be damaged. A battery cell may be damaged by low charge (*i.e.,* below certain level), resulting in a reduction in the ability to charge and retain a full charge. This reduction would be greater than the reduction that may result from normal operational degradation.

Note 4 to paragraph (10): Replacement battery in spares storage may be subject to prolonged storage at a low state of charge.

Issued in Kansas City, Missouri on July 19, 2018.

Pat Mullen,

Manager, Small Airplane Standards Branch, Aircraft Certification Service.

[FR Doc. 2018–15912 Filed 7–24–18; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2016–0442; FRL–9981–06–OAR]

RIN 2060–AS92

National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Portland Cement Manufacturing Industry source category regulated under national emission standards for hazardous air pollutants (NESHAP). These final amendments include no revisions to the numerical emission limits of the rule based on the RTR. The amendments reflect corrections and clarifications of the rule requirements and provisions. While the amendments do not result in reductions in emissions of hazardous air pollutants (HAP), this action results in improved monitoring, compliance, and implementation of the rule.

DATES: This final action is effective on July 25, 2018.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2016–0442. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. Brian Storey, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–1103; fax number: (919) 541–4991; and email address: *storey.brian@epa.gov.* For specific information regarding the risk modeling methodology, contact Mr. James Hirtz, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0881; fax number: (919) 541–0840; and email address: *hirtz.james@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Ms. Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, U.S. EPA Region 5 (E–19J), 77 West Jackson Boulevard, Chicago, Illinois 60604; telephone number: (312) 353–6266; email address: *ayres.sara@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to

ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

ACI activated carbon injection
CAA Clean Air Act
CFR Code of Federal Regulations
CISWI commercial and industrial solid waste incinerators
D/F dioxins and furans
EPA Environmental Protection Agency
HAP hazardous air pollutants
HCl hydrochloric acid
HI hazard index
HQ hazard quotient
lb pounds
MACT maximum achievable control technology
MIR maximum individual risk
ng/dscm nanograms per dry standard cubic meters
NAICS North American Industry Classification System
NEI National Emissions Inventory
NESHAP national emission standards for hazardous air pollutants
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PAH polyaromatic hydrocarbons
PM particulate matter
ppmvd parts per million by volume, dry basis
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RTO regenerative thermal oxidizers
RTR residual risk and technology review
SO_2 sulfur dioxide
TEF toxicity equivalence factors
TEQ toxic equivalents
THC total hydrocarbons
TOSHI target organ-specific hazard index
tpy tons per year
TRIM.FaTE Total Risk Integrated Methodology. Fate, Transport, and Ecological Exposure model
UMRA Unfunded Mandates Reform Act
U.S.C. United States Code

Background information. On September 21, 2017, the EPA proposed revisions to the Portland Cement Manufacturing Industry NESHAP based on our RTR. In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments is available in ''Summary of Public Comments and Responses on Proposed Rules,'' Docket ID No. EPA–HQ–OAR–2016–0442. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

Organization of this Document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source category that is the subject of this final rule. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this action is likely to affect. The rule standards will be directly applicable to the affected sources. Federal, state, local, and tribal government entities are not affected by this action. As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (57 FR 31576), the Portland Cement Manufacturing Industry source category is any facility engaged in manufacturing portland cement by either the wet or dry process. The category includes, but is not limited to, the following process units: kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging, and bulk loading and unloading systems. The source category does not include those kilns that burn hazardous waste and are subject to and regulated under 40 CFR part 63, subpart EEE, or kilns that burn solid waste and are subject to the Commercial and Industrial Solid Waste Incineration (CISWI) rule under 40 Code of Federal Regulations (CFR) part 60, subpart CCCC, and 40 CFR part 60, subpart DDDD.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source category	NAICS[1] code
Portland Cement Manufacturing Industry	327310

[1] North American Industry Classification System.

To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://www.epa.gov/stationary-sources-air-pollution/portland-cement-manufacturing-industry-national-emission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by September 24, 2018. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of HAP from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to, those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 82 FR 44254, September 21, 2017.

B. What is the Portland Cement Manufacturing Industry source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA initially promulgated the Portland Cement Manufacturing Industry NESHAP on June 14, 1999 (64 FR 31898), under title 40, part 63, subpart LLL of the CFR. The rule was amended on April 5, 2002 (67 FR 16614); July 5, 2002 (67 FR 44766); December 6, 2002 (67 FR 72580); December 20, 2006 (71 FR 76518); September 9, 2010 (75 FR 54970); January 18, 2011 (76 FR 2832); February 12, 2013 (78 FR 10006); July 27, 2015 (80 FR 44772); September 11, 2015 (80 FR 54728); and July 25, 2016 (81 FR

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (DC Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

48356). The amendments further defined affected cement kilns as those used to manufacture portland cement, except for kilns that burn hazardous waste, and are subject to and regulated under 40 CFR part 63, subpart EEE, and kilns that burn solid waste, which are subject to the CISWI rule under 40 CFR part 60, subpart CCCC, and 40 CFR part 60, subpart DDDD. Additionally, onsite sources that are subject to standards for nonmetallic mineral processing plants in 40 CFR part 60, subpart OOO, are not subject to 40 CFR part 63, subpart LLL. Crushers are not covered by 40 CFR part 63, subpart LLL, regardless of their location. The subpart LLL NESHAP regulates HAP emissions from new and existing portland cement production facilities that are major or area sources of HAP, with one exception. Kilns located at facilities that are area sources are not regulated for hydrochloric acid (HCl) emissions.

Portland cement manufacturing is an energy-intensive process in which cement is made by grinding and heating a mixture of raw materials such as limestone, clay, sand, and iron ore in a rotary kiln. The kiln is a large furnace that is fueled by coal, oil, gas, coke, and/or various waste materials. The product, known as clinker, from the kiln is cooled, ground, and then mixed with a small amount of gypsum to produce portland cement.

The main source of air toxics emissions from a portland cement plant is the kiln. Emissions originate from the burning of fuels and heating of feed materials. Air toxics are also emitted from the grinding, cooling, and materials handling steps in the manufacturing process. Pollutants regulated under the 40 CFR part 63, subpart LLL, are particulate matter (PM) as a surrogate for non-mercury HAP metals, total hydrocarbons (THC) as a surrogate for organic HAP other than dioxins and furans (D/F), organic HAP as an alternative to the limit for THC, mercury, HCl (from major sources only), and D/F expressed as toxic equivalents (TEQ). The kiln is regulated for all HAP and raw material dryers are regulated for THC or the alternative organic HAP. Clinker coolers are regulated for PM. Finish mills and raw mills are regulated for opacity. During periods of startup and shutdown, the kiln, clinker cooler, and raw material dryer are regulated by work practice standards. Open clinker storage piles are regulated by work practice standards. The emission standards for the affected sources are summarized in Table 2.

TABLE 2—EMISSION LIMITS FOR KILNS, CLINKER COOLERS, RAW MATERIAL DRYERS, RAW AND FINISH MILLS

If your source is a (an):	And the operating mode is:	And it is located at a:	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
1. Existing kiln	Normal operation	Major or area source	PM [1] 0.07	Pounds (lb)/ton clinker.	NA.
			D/F [2] 0.2	Nanograms/dry standard cubic meters (ng/dscm) (TEQ).	7 percent.
			Mercury 55	lb/million (MM) tons clinker.	NA.
			THC [3 4] 24	Parts per million, volumetric dry (ppmvd).	7 percent.
2. Existing kiln	Normal operation	Major source	HCl 3	ppmvd	7 percent.
3. Existing kiln	Startup and shutdown.	Major or area source	Work practice standards (63.1346(g)).	NA	NA.
4. New kiln	Normal operation	Major or area source	PM [1] 0.02	lb/ton clinker	NA.
			D/F [2] 0.2	ng/dscm (TEQ)	7 percent.
			Mercury 21	lb/MM tons clinker	NA.
			THC [3 4] 24	ppmvd	7 percent.
5. New kiln	Normal operation	Major source	HCl 3	ppmvd	7 percent.
6. New kiln	Startup and shutdown.	Major or area source	Work practice standards (63.1346(g)).	NA	NA.
7. Existing clinker cooler.	Normal operation	Major or area source	PM 0.07	lb/ton clinker	NA.
8. Existing clinker cooler.	Startup and shutdown.	Major or area source	Work practice standards (63.1348(b)(9)).	NA	NA.
9. New clinker cooler	Normal operation	Major or area source	PM 0.02	lb/ton clinker	NA.
10. New clinker cooler.	Startup and shutdown.	Major or area source	Work practice standards (63.1348(b)(9)).	NA	NA.
11. Existing or new raw material dryer.	Normal operation	Major or area source	THC [3 4] 24	ppmvd	NA.
12. Existing or new raw material dryer.	Startup and shutdown.	Major or area source	Work practice standards (63.1348(b)(9)).	NA	NA.
13. Existing or new raw or finish mill.	All operating modes	Major source	Opacity 10	percent	NA.

[1] The initial and subsequent PM performance tests are performed using Method 5 or 5I and consist of three test runs.

[2] If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 degrees Fahrenheit or less, this limit is changed to 0.40 ng/dscm (TEQ).

[3] Measured as propane.

[4] Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP.

C. What changes did we propose for the Portland Cement Manufacturing Industry source category in our September 21, 2017, proposed rule?

On September 21, 2017, the EPA published a proposed rule in the **Federal Register** for the Portland Cement Manufacturing Industry NESHAP, 40 CFR part 63, subpart LLL, that took into consideration the RTR analyses (82 FR 44254). In the proposed rule, we found that risks due to emissions of air toxics from this source category are acceptable and that the standards provide an ample margin of safety to protect public health, and we identified no new cost-effective controls under the technology review to achieve further emissions reductions. We proposed no revisions to the numerical emission limits based on these analyses. However, the EPA did propose amendments to correct and clarify rule requirements and provisions.

III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Portland Cement Manufacturing Industry source category. This action also finalizes other changes to the NESHAP including amendments to correct and clarify rule requirements and provisions.

A. What are the final rule amendments based on the risk review for the Portland Cement Manufacturing Industry source category?

The EPA proposed no changes to 40 CFR part 63, subpart LLL, based on the risk review conducted pursuant to CAA section 112(f). Specifically, we determined that risks from the Portland Cement Manufacturing Industry source category are acceptable, that the standards provide an ample margin of safety to protect public health, and that it is not necessary to set a more stringent standard to prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that changed this determination. Therefore, we are not requiring additional controls under CAA section 112(f)(2).

B. What are the final rule amendments based on the technology review for the Portland Cement Manufacturing Industry source category?

The EPA proposed no changes to 40 CFR part 63, subpart LLL, based on the technology review conducted pursuant to CAA section 112(d)(6). Specifically, we determined that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. The EPA received no new data or other information during the public comment period that affected the technology review determination. Therefore, we are not requiring additional control under CAA section 112(d)(6).

C. What other changes have been made to the NESHAP?

In the September 21, 2017, proposed rule, we proposed additional revisions, which included changes to clarify monitoring, testing, and recordkeeping, and reporting requirements and the correction of typographical errors. Based on the comments received, we are now finalizing the following amendments to the rule:

- We correct a paragraph in the reporting requirements that mistakenly required that affected sources report their 30-operating day rolling average for D/F temperature monitoring.
- We correct a provision that required facility owners or operators to keep records of both daily clinker production and kiln feed rates.
- We clarify that the submittal dates for semiannual summary reports required under 40 CFR 63.1354(b)(9) are 60 days after the end of the reporting period.
- We resolve conflicting provisions that apply when a sulfur dioxide (SO_2) continuous parametric monitoring system is used to monitor HCl compliance.
- We clarify that the requirement in 40 CFR 63.1349(b)(1)(vi) only applies to kilns with inline raw mills.
- We clarify that the 40 CFR part 63, subpart LLL D/F standards were developed based on toxic equivalency factors (TEFs) developed in 1989, as referenced in the TEQ definition section of the rule (40 CFR 63.1341).
- We clarify that the performance test requirements for affected sources that have been idle through one or more periods that required a performance test to demonstrate compliance.
- We remove 40 CFR 63.1343(d) and Table 2 that contain emission limits that were applicable prior to September 2015.
- We revise Equation 18 of the rule to include a missing term in the equation.
- We revise 40 CFR 63.1350(g)(4) to say ''record'' instead of ''report.''

D. What are the effective and compliance dates of the standards?

Because these amendments only provide corrections and clarifications to the current rule and do not impose new requirements on the industry, we are making these amendments effective and are requiring compliance upon promulgation of the final rule.

IV. What is the rationale for our final decisions and amendments for the Portland Cement Manufacturing Industry source category?

This section provides a description of our proposed action and this final action, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. Other comments, comment summaries, and the EPA's responses can be found ''National Emission Standards for Hazardous Air Pollutants from Portland Cement Manufacturing (40 CFR part 63, subpart LLL) Residual Risk and Technology Review, Final Amendments: Summary of Public Comments and Responses on Proposed Rules,'' which is available in the docket for this action (EPA–HQ–OAR–2016–0442).

A. Residual Risk Review for the Portland Cement Manufacturing Industry Source Category

1. What did we propose pursuant to CAA section 112(f) for the Portland Cement Manufacturing Industry source category?

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effects, in the September 21, 2017, proposed rule (82 FR 44254). The results of the risk assessment are presented briefly in Table 3, and in more detail in the document titled ''Residual Risk Assessment for the Portland Cement Manufacturing Source Category in Support of the July 2018 Final Rule,'' available in the docket for this rulemaking (Docket ID No. EPA–HQ–OAR–2016–0442).

TABLE 3—INHALATION RISK ASSESSMENT SUMMARY FOR PORTLAND CEMENT MANUFACTURING INDUSTRY SOURCE CATEGORY

	Cancer MIR (in-1 million)		Cancer incidence (cases per year) [1]	Population with risk of 1-in-1 million or greater [1]	Population with risk of 10-in-1 million or greater [1]	Max chronic noncancer HI
	Based on actual emissions	Based on allowable emissions				
Source Category	1 (formaldehyde, benzene)	4 (formaldehyde, benzene)	0.01	130	0	HI < 1 (Actuals and Allowables).
Whole Facility	70 (arsenic and chromium VI)		0.02	20,000	690	HI = 1 (Actuals).

[1] Cancer incidence and populations exposed are based upon actual emissions.

The results of the chronic inhalation cancer risk assessment based on actual emissions from the Portland Cement Manufacturing Industry source category indicate that the maximum lifetime individual cancer risk posed by the 91 facilities is 1-in-1 million or less. The total estimated cancer incidence from this source category is 0.01 excess cancer cases per year, or one excess case in every 100 years. Regarding the noncancer risk assessment, the maximum chronic noncancer target organ-specific hazard index (TOSHI) for the source category could be up to 0.02 (for respiratory health effects) from the portland cement manufacturing processes. Regarding short-term (acute) health hazards posed by actual baseline emissions, the highest screening acute hazard quotient (HQ) for the source category is estimated to be 0.2. No facilities were found to have an acute HQ greater than 1 for any of the acute benchmarks examined.

Potential multipathway health risks under a fisher and farmer scenario were identified using a 3-tier screening analysis of HAP known to be persistent and bio-accumulative in the environment emitted by facilities in this source category and, if necessary, a site-specific assessment utilizing TRIM.FaTE. Based on the results of the multipathway cancer screening analyses of arsenic and dioxin emissions, we conclude that the cancer risk from ingestion exposure to the individual most exposed is less than 1-in-1 million for arsenic, and, based on a tier 3 analysis, less than 20-in-1 million for dioxins. Based on the tier 1 multipathway screening analysis of cadmium emissions and the refined site-specific multipathway analysis of mercury emissions, the maximum chronic noncancer TOSHI due to ingestion exposure is less than 1 for actual emissions.

Finally, potential differences between actual emission levels and the maximum emissions allowable under the EPA's standards (*i.e.,* ''allowable emissions'') were also calculated for the source category. Allowable emissions were calculated using the emission limits for existing sources in the current NESHAP in conjunction with the emission factors for metallic HAP, organic HAP and D/F congeners, as appropriate, the annual production capacity, and, when the emission limit was a concentration-based limit, the annual hours of operation reported by each source. Risk results from the inhalation risk assessment indicate that the maximum lifetime individual cancer risk could increase from 1-in-1 million for actual emissions to as high as 4-in-1 million for allowable emissions. At the allowable emissions level, the maximum chronic noncancer TOSHI was 0.06 (for respiratory health effects). The total estimated cancer incidence from this source category at the allowable emissions level was about 0.03 excess cancer cases per year, or 3 excess cases in every 100 years.

In determining whether risk is acceptable, the EPA considered all available health information and risk estimation uncertainty, as described above. The results indicate that inhalation cancer risk to the individual most exposed under both actual and allowable emissions scenarios are considerably less than 100-in-1 million, which is the presumptive limit of acceptability. The maximum chronic noncancer TOSHI due to inhalation exposures is less than 1 for both actual emissions and up to 1 due to allowable emissions. The multipathway analysis indicates a cancer risk less than 20-in-1 million from ingestion based upon our tier 3 screening analysis, while a refined site-specific multipathway analysis indicates that the HI for ingestion exposures is less than 1. Finally, the conservative evaluation of acute noncancer risk concluded that acute risk is below a level of concern. Taking into account this information, we proposed that the risks remaining after implementation of the existing MACT standards for the Portland Cement Manufacturing Industry were acceptable.

As directed by CAA section 112(f)(2), we also evaluated whether the existing MACT standards for the Portland Cement Manufacturing Industry provide an ample margin of safety to protect public health. In addition to considering all of the health risks and other health information considered in the risk acceptability determination, in the ample margin of safety analysis we evaluated the cost and feasibility of available control technologies and other measures (including the controls, measures, and costs reviewed under the technology review) that could be applied in this source category to further reduce the risks due to emissions of HAP. Our inhalation risk analysis indicated very low risk from the facilities in the source category based upon actual emissions (1-in-1 million), and just slightly higher risk based upon allowable emissions (4-in-1 million). Therefore, very little reduction in inhalation risk could be realized regardless of the availability of control options.

The HAP risk drivers contributing to the inhalation maximum individual risk (MIR) were gaseous organic HAP: formaldehyde, benzene, naphthalene, and acetaldehyde. More than 62 percent of the mass emissions of these compounds originated from kiln operations. The first technology we considered in our ample margin of safety analysis was a regenerative thermal oxidizer (RTO) used to control organic HAP emissions from the kiln exhaust. It is expected that an RTO, when used in conjunction with the existing activated carbon injection (ACI), only offers an additional 50-percent removal efficiency of organic HAP from the kiln exhaust, due to the reduced THC concentration leaving the ACI. ACI control devices are currently used by industry, and the addition of an RTO as control would include configuring the RTO in series, following the ACI. We found that the use of an RTO in series with the existing ACI control was not cost effective for this industry, and given the small reduction in organic HAP emissions, the addition of an RTO would have little effect on the source category risks.

Other technologies evaluated included the use of an existing ACI with the addition of wet scrubbers to help

control organic HAP, including D/F emissions, from the kiln exhaust. For the March 24, 1998, proposal of the Portland Cement Manufacturing Industry NESHAP (63 FR 14182), we performed a beyond-the-floor analysis and determined that, based on the additional costs and the level of D/F emissions reduction achievable, the costs were not justified (63 FR 14199–14201). In this technology review, we conclude that, as with the findings of the 1998 rule, the use of the combination of an ACI system in series with a wet scrubber is not cost effective for the industry to reduce organic HAP or D/F emissions, and would have little effect on the source category risk.

Although our multipathway screening analysis results did not indicate risks of concern from mercury emissions, we also performed an evaluation of halogenated carbon injection as a control of mercury emissions from the kiln exhaust. In the May 6, 2009, beyond-the-floor analysis for the Portland Cement Manufacturing Industry NESHAP, we determined that, based on the costs of control, and the negligible level of mercury emission reduction achieved by the controls, the costs of using a halogenated carbon injection system were not justified (74 FR 21149). As we determined in the 2009 rule, we do not consider the use of halogenated carbon injection system to be cost effective for the industry to use to reduce mercury emissions, and it would have little effect on the low risks identified for this source category.

Due to the low risk, the minimal risk reductions that could be achieved with the various control options that we evaluated, and the substantial costs associated with additional control options, we proposed that the current standards provide an ample margin of safety to protect public health.

The EPA conducted a screening assessment to examine the potential for an adverse environmental effect as required under section 112(f)(2)(A) of the CAA. Section 112(a)(7) of the CAA defines ''adverse environmental effect'' as ''any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.'' Based on the results of the environmental risk screening assessment, the EPA concluded that there was not an adverse environmental effect from the Portland Cement Manufacturing Industry source category.

2. How did the risk review change for the Portland Cement Manufacturing Industry source category?

We received comments both supporting and opposing the proposed residual risk review and our proposed determination that no revisions are warranted under CAA section 112(f)(2). After review of these comments, we determined that no changes to our risk review are necessary. The following section provides a summary of the major comments received and our responses to those comments. All comments and our specific responses can be found in the document titled ''National Emission Standards for Hazardous Air Pollutants from Portland Cement Manufacturing (40 CFR part 63, subpart LLL) Residual Risk and Technology Review, Final Amendments: Summary of Public Comments and Responses on Proposed Rules,'' which is available in the docket for this action.

3. What key comments did we receive on the risk review, and what are our responses?

Generally, comments that were not supportive of the proposed determination suggested changes to the underlying risk assessment methodology. One comment specific to the source category stated that the EPA's National Emissions Inventory (NEI) data from 2014 documented 1,447.25 tons of polycyclic aromatic hydrocarbons (PAH) emitted by the source category, yet PAH emission data were not included in Table 3.1–1, ''Summary of Emissions from the Portland Cement Manufacturing Source Category and Dose-Response Values Used in the Residual Risk Assessment'' (Docket ID No. EPA–HQ–OAR–2016–0442–0153), nor were PAH quantitatively assessed elsewhere in the risk assessment.

The EPA disagrees with the commenter that the risk assessment did not address PAH. The Portland Cement Manufacturing Industry NESHAP regulates organic HAP emissions indirectly with an emissions limit for THC. As an alternative, the EPA established an emissions limit for non-dioxin organic HAP. In developing the MACT standard, the EPA reviewed the results of 18 test reports where organic HAP were measured (Docket ID No. EPA–HQ–OAR–2002–0051–3429). Naphthalene was the only PAH reported. Based on a review of emissions test data where organic HAP were measured simultaneously with THC, the EPA found that, on average, organic HAP emissions comprise about 35 percent of the THC. In the test data reviewed for the 2009 proposed rule (74 FR 21136), nine specific organic HAP were identified and are the pollutants that must be tested for when choosing to comply with the organic HAP limit. One of the nine organic HAP identified was the PAH naphthalene. No other PAH species were present in measurable amounts in the test data reviewed. Naphthalene is one of the PAH listed in Table 3.1–1 of the risk assessment report. Based on our review of the test data for organic HAP, the only PAH emitted above detection limits is naphthalene.

The EPA also disputes the commenter's claim that PAH emissions, as reported in the 2014 NEI, totaled over 1,400 tons. Our inspection of the 2014 NEI data for total PAH from the cement sector showed annual emissions of 1,449 pounds, not tons. That is less than 1 tpy for total PAH, whereas our risk assessment used total naphthalene emissions of 38 tpy from the Portland Cement Manufacturing Industry source category. Furthermore, no additional PAH emissions data were submitted to the EPA by the commenter or other commenters to support their claims.

EPA also received comments and information from representatives of portland cement manufacturing facilities who, while supportive of EPA's residual risk determination, stated that the EPA's risk estimates were based on flawed data, such that emission rates were overestimated for several pollutants. In response, the EPA acknowledges that our risk assessment results for the Portland Cement Manufacturing Industry source category are dependent on the emission rates used in the assessment. If we were to lower emission rates based on more accurate data, we expect lower risk estimates. Because the EPA has determined that the risk is acceptable, and that the existing standards provide an ample margin of safety to protect public health, using the emissions data provided by the commenters would potentially reduce risk further but would not change our determinations under the risk review. Accordingly, we concluded that it was reasonable to not update the risk assessment following proposal. We, therefore, finalized the risk assessment report and re-submitted it to the docket as ''Residual Risk Assessment for the Portland Cement Manufacturing Source Category in Support of the July 2018 Final Rule.''

4. What is the rationale for our final approach and final decisions for the risk review?

For the reasons explained in the proposed rule, the Agency determined that the risks from the Portland Cement

Manufacturing Industry source category are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Since proposal, our determinations regarding risk acceptability, ample margin of safety, and adverse environmental effects have not changed. Therefore, we are not revising 40 CFR part 63, subpart LLL, to require additional controls pursuant to CAA section 112(f)(2) based on the residual risk review and are readopting the existing emissions standards under CAA section 112(f)(2).

B. Technology Review for the Portland Cement Manufacturing Industry Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Portland Cement Manufacturing Industry source category?

Pursuant to CAA section 112(d)(6), the EPA conducted a technology review and summarized the results of the review in the September 21, 2017, proposed rule (82 FR 44277). The results of the technology review are briefly discussed below, and in more detail in the memorandum, ''Technology Review for the Portland Cement Production Source Category,'' which is available in the docket for this action (Docket ID No. EPA–HQ–OAR–2016–0442–0189). The technology review focused on identifying and evaluating developments in practices, processes, and control technologies for the Portland Cement Manufacturing Industry source category. We reviewed technologies currently available to industry, and reviewed previous beyond-the-floor analyses, to determine if there had been any developments in existing technologies, or whether previous conclusions made by the EPA had changed. Additionally, we reviewed new developments in control technologies and determined the availability of each control, the costs associated with the installation and annual maintenance associated with each control, and the effectiveness of each technology in reducing HAP emissions. Based on information available to the EPA, the technologies reviewed do not provide sufficient reductions in HAP to support changing the standard to reflect technological developments (82 FR 44277).

2. How did the technology review change for the Portland Cement Manufacturing Industry source category?

The technology review for the Portland Cement Manufacturing Industry source category has not changed since proposal. As proposed, the EPA is not making changes to the standards pursuant to CAA section 112(d)(6).

3. What key comments did we receive on the technology review, and what are our responses?

We received comments in support of the proposed determination that no revisions to the standards are necessary under CAA section 112(d)(6).

We also received comments opposing our proposed technology review determination. Of the comments received, one commenter specifically opposed the technology review determination, and suggested that the EPA did not consider or recommend the use of selective catalytic reduction technologies (SCR) as mercury control, to control D/F emissions, as THC and volatile organic compound control, and as metallic HAP control.

The EPA disagrees with the commenter's argument that EPA failed to accurately assess SCR as a technology development capable of controlling HAP emissions. SCR technology is used to control nitrogen oxide (NOx) emissions from gas turbines, internal combustion engines, and fossil fuel-fired utility boilers. The use of SCR by the Portland Cement Manufacturing Industry source category is, however, problematic for various reasons. For example, the chemical composition of raw materials used to manufacture portland cement varies by location across the United States. This variability in raw materials means that the stack gas chemistry also varies across cement plants, often requiring plant-specific controls for certain pollutants, such as NOx. The presence of pyritic sulfur in raw materials and the resulting SO_2 emissions, for example, requires that higher temperatures be maintained at the kiln to avoid the formation of ammonium bisulfate salt, which can foul SCR catalysts. Additionally, high dust levels and the nature of dusts typical of the portland cement manufacturing process also creates difficulties not found in other industries where SCR works well for NOx control. In the case of mercury, SCR does not directly reduce mercury emissions. Instead, SCR oxidizes mercury from its elemental form and the oxidized form can then be more easily captured in scrubbers. However, since scrubbers are uncommon in the cement industry, SCR would have little impact in reducing mercury emissions from cement kilns, unless a scrubber was also installed. Regarding D/F emissions control, the primary method of D/F control at U.S. cement plants is temperature control, which is already a requirement of the current subpart LLL standard. In general, no information is available by facilities operating SCR in the U.S. relevant to the effectiveness of an SCR for HAP control.

Review of comments on our technology review did not change our proposed determination under CAA section 112(d)(6), These comments and our specific responses to those comments can be found in the comment summary and response document titled, ''National Emission Standards for Hazardous Air Pollutants from Portland Cement Manufacturing (40 CFR part 63, subpart LLL) Residual Risk and Technology Review, Final Amendments: Summary of Public Comments and Responses on Proposed Rules,'' which is available in the docket for this action.

4. What is the rationale for our final approach for the technology review?

For the reasons explained in the preamble to the proposed rule, we determined there were several technologies that have the potential for reducing HAP emissions from cement kiln. However, as stated in the proposed rule, most of these technologies have not been widely used in the United States by the Portland Cement Manufacturing Industry, so source category-specific data on their long-term performance and costs are lacking (82 FR 44278). Since proposal, neither the technology review nor our determination as a result of the technology review has changed, and we are not revising 40 CFR part 63, subpart LLL, pursuant to CAA section 112(d)(6).

C. Other Amendments to the Portland Cement Manufacturing Industry NESHAP

1. What amendments did we propose?

In the September 21, 2017, action, we proposed the following amendments to the rule to clarify monitoring, testing, and recordkeeping and reporting requirements and to correct typographical errors:

- We proposed to remove the reference to the D/F temperature monitoring system in 40 CFR 63.1354(b)(9)(vi).
- We proposed to correct a provision that requires facility owners or operators

to keep records of both daily clinker production and kiln feed rates.

- We proposed to clarify that the submittal dates for semiannual summary reports required under 40 CFR 63.1354(b)(9) are 60 days after the end of the reporting period consistent with the Agency's statement in the October 2016 rule guidance for 40 CFR part 63, subpart LLL.
- We proposed to resolve conflicting provisions in 40 CFR 63.1349(b)(8)(x) and 40 CFR 63.1350(l)(3).
- We proposed to clarify the requirement in 40 CFR 63.1349(b)(1)(vi) to state that the provision of the section only applies to kilns with inline raw mills.
- We proposed that the 1989 TEFs be incorporated into the rule to clarify that they are the appropriate factors for calculating TEQ.
- We proposed to clarify the performance test requirements after extended shutdowns of existing kilns.
- We proposed to remove 40 CFR 63.1343(d) and Table 2 that contain emission limits that were applicable prior to September 2015.

2. What key comments did we receive and what are our responses?

Several commenters stated they generally supported the September 21, 2017, proposed rule, with several stating that the proposed revisions to 40 CFR part 63, subpart LLL, would improve monitoring, compliance, and implementation of the rule.

There were some comments that favored, and some that opposed the EPA's proposal to allow facilities 180 days to demonstrate that a kiln can comply with the standards when coming out of an extended idle period (82 FR 44279). These comments are discussed in the following paragraphs.

One commenter in favor of the proposal requested that the EPA clarify that units that were idled during the time when compliance was required to be demonstrated, have 180 days *after coming out of the idle period* to demonstrate compliance. To accomplish this, the commenter recommended that EPA revise the language of proposed 40 CFR 63.1348(a) to state: ''For an affected source subject to this subpart, you must demonstrate compliance with the emissions standards and operating limits by using the test methods and procedures in §§ 63.1349 and 63.7. Any affected source that was unable to demonstrate compliance before the compliance date due to being idled, or that had demonstrated compliance but was idled during the normal window for the next compliance test, must demonstrate compliance within 180 days after coming out of the idle period.'' The EPA believes this request provides additional clarification to the proposed rule amendment, and has revised the rule text to incorporate the suggested change.

In contrast, the EPA received comments opposed to our decision to allow facilities 180 days to demonstrate that a kiln can comply with the rule standards when coming out of an extended idle period. The commenter took issue with the fact that the regulatory language does not make clear whether the 180-day non-compliant period would be just a 6-month exemption or could be even longer, and requested a clear trigger start or end-date, or sources could use this repeatedly after any shutdown, simply by citing the new provision. Further, the commenter noted that the proposed rule does not define the term ''due to being idled,'' nor does it include language to limit the use of this exemption. The commenter stated that the EPA's proposal would contravene the CAA's requirement for ''enforceable'' emission limits, and any cement plant that took advantage of the EPA's proposed 180-day compliance exemption would violate its permit requirements. As stated by the commenter, a facility that restarted operations after being idled and then ran for 6 months without demonstrating compliance could not possibly certify that it was ''in compliance'' with permit requirements because it would not know if it was in compliance; likewise, it could not ''promptly report any deviations'' because it would not know if deviations occurred.

The EPA's response regarding the commenter's concerns regarding the 180-day exemption is based, in part, on the decision made on March 16, 1994 (59 FR 12425), and promulgated in 40 CFR 63.7(a)(2) to allow new facilities 180 days to demonstrate initial compliance. The provisions of 40 CFR 63.1348(a) are to allow previously idled kilns to reach a steady-state condition and schedule and perform compliance testing, as provided for new emission sources in 40 CFR 63.7(a)(2). It is reasonable to expect that a kiln operating the same controls that previously resulted in compliance would continue to be in compliance when operating the same equipment in the same manner, and the 180-day extension is simply a period during which they must complete the process of demonstrating compliance. There is no change to the facilities obligation to operate in compliance.

Additionally, it is unreasonable to assume that portland cement manufacturing facilities would cease operations of a kiln for a period of time in order to circumvent compliance demonstration requirements. It is our opinion that this would not be in the best economic interest of the facility, by potentially limiting production, and profitability, for the sake of circumventing a rule requirement for demonstrating compliance.

Lastly, we believe the recommended amendment to the proposed rule suggested by the previous commenter would allow a specific time to demonstrate compliance, and therefore, are revising the rule to state, ''Any affected source that was unable to demonstrate compliance before the compliance date due to being idled, or that had demonstrated compliance but was idled during the normal window for the next compliance test, must demonstrate compliance within 180 days after coming out of the idle period.''

These comments and our specific responses to those comments can be found in the comment summary and response document titled, ''National Emission Standards for Hazardous Air Pollutants from Portland Cement Manufacturing (40 CFR part 63, subpart LLL) Residual Risk and Technology Review, Final Amendments: Summary of Public Comments and Responses on Proposed Rules,'' which is available in the docket for this action.

3. How did the requirements change since proposal?

Based on the comments received, we are now finalizing the following amendments to the rule:

- We correct a paragraph in the reporting requirements that mistakenly required that affected sources report their 30-operating day rolling average for D/F temperature monitoring, including a revision to 40 CFR 63.1350(g)(4) to say ''record'' instead of ''report.''
- We correct a provision that required facility owners or operators to keep records of both daily clinker production and kiln feed rates.
- We clarify that the submittal dates for semiannual summary reports required under 40 CFR 63.1354(b)(9) are 60 days after the end of the reporting period.
- We resolve conflicting provisions that apply when an SO_2 continuous parametric monitoring system is used to monitor HCl compliance.
- We clarify the requirement in 40 CFR 63.1349(b)(1)(vi) only applies to kilns with inline raw mills.
- We clarify that the 40 CFR part 63, subpart LLL, D/F standards were

developed based on TEFs developed in 1989, as referenced in the TEQ definition section of the rule (40 CFR 63.1341).

- We clarify the performance test requirements for affected sources that have been idle through one or more periods that required a performance test to demonstrate compliance.
- We remove 40 CFR 63.1343(d) and Table 2 that contain emission limits that were applicable prior to September 2015.
- We revise Equation 18 of the rule to include a missing term in the equation.

V. Summary of Cost, Environmental, and Economic Impacts, and Additional Analyses Conducted

A. What are the affected sources?

We anticipate that the 91 portland cement manufacturing facilities currently operating in the United States will be affected by this final rule.

B. What are the air quality impacts?

We are not establishing new emission limits and are not requiring additional controls; therefore, no air quality impacts are expected as a result of the final amendments to the rule.

C. What are the cost impacts?

Recent amendments to the Portland Cement Manufacturing Industry NESHAP have addressed electronic reporting and changes in policies regarding startup, shutdown, and malfunction. Additionally, there are no changes to emission standards or add-on controls associated with this action. Therefore, the final amendments impose no additional costs.

D. What are the economic impacts?

No economic impacts result from this final action.

E. What are the benefits?

While the amendments in this final rule do not result in reductions in emissions of HAP, this action results in improved monitoring, compliance, and implementation of the rule.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations (40 CFR part 63, subpart LLL) and has assigned OMB control number 2060–0416. This action does not change the information collection requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. We estimate that three of the 26 existing Portland cement entities are small entities and comprise three plants. After considering the economic impacts of this final action on small entities, we have concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law. The EPA is aware of one tribally owned Portland cement facility currently subject to 40 CFR part 63, subpart LLL, that will be subject to this final action. However, the provisions of this rule are not expected to impose new or substantial direct compliance costs on tribal governments since the provisions in this final action are clarifying and correcting monitoring and testing requirements and recordkeeping and reporting requirements. This final action also provides clarification for owners and operators on bringing new or previously furloughed kilns back on line. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629).

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by U.S.C. 804(2).

List of Subjects for 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: July 13, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations (CFR) is amended as follows:

PART 63 — NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart LLL—National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry

■ 2. Section 63.1341 is amended by:
■ a. Removing the definition of ''affirmative defense''; and
■ b. Revising the definitions of ''dioxins and furans (D/F),'' ''in-line coal mill,'' and ''TEQ.''

The revisions read as follows:

§ 63.1341 Definitions.

* * * * *

Dioxins and furans (D/F) means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

* * * * *

In-line coal mill means a coal mill using kiln exhaust gases in their process. A coal mill with a heat source other than the kiln or a coal mill using exhaust gases from the clinker cooler is not an in-line coal mill.

* * * * *

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989. The 1989 Toxic Equivalency Factors (TEFs) used to determine the dioxin and furan TEQs are listed in Table 2 to subpart LLL of Part 63.

* * * * *

§ 63.1343 [Amended]

■ 3. Section 63.1343 is amended by removing paragraph (d) and Table 2.

■ 4. Section 63.1348 is amended by:
■ a. Adding a sentence after the first sentence in paragraph (a) introductory text;
■ b. Revising paragraph (a)(3)(i), the second sentence in paragraph (a)(3)(iv), and paragraphs (a)(4)(ii), (a)(7)(ii), (b)(3)(ii), and (b)(4);
■ c. Adding a heading to paragraph (b)(5); and
■ d. Revising paragraph (b)(5)(i).

The additions and revisions read as follows:

§ 63.1348 Compliance requirements.

(a) *Initial Performance Test Requirements.* * * * Any affected source that was unable to demonstrate compliance before the compliance date due to being idled, or that had demonstrated compliance but was idled during the normal window for the next compliance test, must demonstrate compliance within 180 days after coming out of the idle period. * * *

* * * * *

(3) *D/F compliance.* (i) If you are subject to limitations on D/F emissions under § 63.1343(b), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in § 63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. Determine the D/F TEQ concentration for each run and calculate the arithmetic average of the TEQ concentrations measured for the three runs to determine continuous compliance.

* * * * *

(iv) * * * Compliance is demonstrated if the system is maintained within ±5 percent accuracy during the performance test determined in accordance with the procedures and criteria submitted for review in your monitoring plan required in § 63.1350(p).

(4) * * *

(ii) *Total Organic HAP Emissions Tests.* If you elect to demonstrate compliance with the total organic HAP emissions limit under § 63.1343(b) in lieu of the THC emissions limit, you must demonstrate compliance with the total organic HAP emissions standards by using the performance test methods and procedures in § 63.1349(b)(7).

* * * * *

(7) * * *

(ii) Perform required emission monitoring and testing of the kiln exhaust prior to the reintroduction of the coal mill exhaust, and also testing the kiln exhaust diverted to the coal mill. All emissions must be added together for all emission points, and must not exceed the limit per each pollutant as listed in § 63.1343(b).

(b) * * *

(3) * * *

(ii) *Bag Leak Detection System (BLDS).* If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a BLDS that is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(ii).

(4) *D/F Compliance.* If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a continuous monitoring system (CMS) that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of § 63.1350(g).

(5) *Activated Carbon Injection Compliance.* (i) If you use activated carbon injection to comply with the D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated, and maintained to record the rate of activated carbon injection in accordance with the requirements § 63.1350(h)(1).

* * * * *

■ 5. Section 63.1349 is amended by:
■ a. Revising paragraphs (b)(1)(vi), (b)(3)(iv), (b)(4)(i), (b)(6)(i)(A), (b)(7)(viii)(A), (b)(8)(vi), and (b)(8)(vii)(B); and
■ b. Removing and reserving paragraph (d).

The revisions read as follows:

§ 63.1349 Performance testing requirements.

* * * * *

(b)(1) * * *

(vi) For each performance test, conduct at least three separate test runs under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Conduct each test run to collect a minimum sample volume of 2 dscm for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Calculate the time weighted average of the results from three

consecutive runs, including applicable sources as required by paragraph (b)(1)(viii) of this section, to determine compliance. You need not determine the particulate matter collected in the impingers ''back half'' of the Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the ''back half'' for other purposes. For kilns with inline raw mills, testing must be conducted while the raw mill is on and while the raw mill is off. If the exhaust streams of a kiln with an inline raw mill and a clinker cooler are comingled, then the comingled exhaust stream must be tested with the raw mill on and the raw mill off.

* * * * *

(3) * * *

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with § 63.1346(b).

* * * * *

(4) * * *

(i) If you are subject to limitations on THC emissions, you must operate a CEMS in accordance with the requirements in § 63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 to 60 ppmvw and the reference method (RM) is Method 25A of appendix A to part 60 of this chapter.

* * * * *

(6) * * *

(i)(A) If the source is equipped with a wet scrubber, tray tower or dry scrubber, you must conduct performance testing using Method 321 of appendix A to this part unless you have installed a CEMS that meets the requirements § 63.1350(l)(1). For kilns with inline raw mills, testing must be conducted for the raw mill on and raw mill off conditions.

* * * * *

(7) * * *

(viii) * * *

(A) Determine the THC CEMS average values in ppmvw, and the average of your corresponding three total organic HAP compliance test runs, using Equation 12.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} X_{\mathrm{i}}\,, \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Y_{\mathrm{i}} \qquad \text{(Eq. 12)}$$

Where:

$\bar{x}$ = The THC CEMS average values in ppmvw.

X_i = The THC CEMS data points for all three test runs i.

$\bar{y}$ = The organic HAP average values in ppmvw.

Y_i = The organic HAP concentrations for all three test runs i.

n = The number of data points.

* * * * *

(8) * * *

(vi) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating (''mill on'') and while the raw mill is not operating (''mill off''). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the SO_2 levels measured during raw mill on and raw mill off compliance testing with Equation 17.

$$R = (y * t) + x * (1 - t) \qquad \text{(Eq. 17)}$$

Where:

R = Operating limit as SO_2, ppmvw.

y = Average SO_2 CEMS value during mill on operations, ppmvw.

t = Percentage of operating time with mill on, expressed as a decimal.

x = Average SO_2 CEMS value during mill off operations, ppmvw.

1-t = Percentage of operating time with mill off, expressed as a decimal.

(vii) * * *

(B) Determine your SO_2 CEMS instrument average ppm, and the average of your corresponding three HCl compliance test runs, using Equation 18.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} X_1\,, \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Y_1 \qquad \text{(Eq. 18)}$$

Where:

$\bar{x}$ = The SO_2 CEMS average values in ppmvw.

X_1 = The SO_2 CEMS data points for the three runs constituting the performance test.

$\bar{y}$ = The HCl average values in ppmvw.

Y_1 = The HCl emission concentration expressed as ppmv corrected to 7 percent oxygen for the three runs constituting the performance test.

n = The number of data points.

* * * * *

■ 6. Section 63.1350 is amended by revising paragraphs (g) introductory text, (g)(4), (h)(2)(ii), (j), (k)(2) introductory text, (k)(2)(ii) and (iii), (k)(5)(ii), (l)(1) introductory text, and (l)(3) to read as follows:

§ 63.1350 Monitoring requirements.

* * * * *

(g) *D/F monitoring requirements.* If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs (g)(1) through (5) and (m)(1) through (4) of this section to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.

* * * * *

(4) Every hour, record the calculated rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. See § 63.1349(b)(3).

* * * * *

(h) * * *

(2) * * *

(ii) Each hour, calculate the 3-hour rolling average of the selected parameter value for the previous 3 hours of process operation using all of the one-minute data available (*i.e.,* the CMS is not out-of-control).

* * * * *

(j) *Total organic HAP monitoring requirements.* If you are complying with the total organic HAP emissions limits, you must continuously monitor THC according to paragraphs (i)(1) and (2) of this section or in accordance with Performance Specification 8 or Performance Specification 8A of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.

(k) * * *

(2) In order to quality assure data measured above the span value, you must use one of the four options in paragraphs (k)(2)(i) through (iv) of this section.

* * * * *

(ii) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (k)(1) of this section using the following procedure. Conduct a weekly ''above span linearity'' calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The ''above span'' reference gas must meet the requirements of PS 12A, Section 7.1 and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The ''above span linearity'' challenge is successful if the value measured by the Hg CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the Hg CEMS during the above span linearity challenge exceeds ±10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new ''above span linearity'' challenge met before returning the Hg CEMS to service, or data above span from the Hg CEMS must be subject to the quality assurance procedures established in paragraph (k)(2)(iii) of this section. In this manner all hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ±20 percent of the certified value of the reference gas must be normalized using Equation 22.

$$\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gas}\ x\ Measured\ stack\ gas\ result = Normalized\ stack\ gas\ result \quad \text{(Eq. 22)}$$

(iii) Quality assure any data above the span value established in paragraph (k)(1) of this section using the following procedure. Any time two consecutive 1-hour average measured concentrations of Hg exceeds the span value you must, within 24 hours before or after, introduce a higher, ''above span'' Hg reference gas standard to the Hg CEMS. The ''above span'' reference gas must meet the requirements of PS 12A, Section 7.1, must target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include ''above span'' calibrations done before or after the above span measurement period. Record and report the results of this procedure as you would for a daily calibration. The ''above span'' calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20 percent of the certified value of the reference gas, then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the ''above span'' calibration for reporting based on the Hg CEMS response to the reference gas as shown in Equation 22. Only one ''above span'' calibration is needed per 24-hour period.

* * * * *

(5) * * *

(ii) On a continuous basis, determine the mass emissions of mercury in lb/hr from the alkali bypass and coal mill exhausts by using the mercury hourly emissions rate and the exhaust gas flow rate to calculate hourly mercury emissions in lb/hr.

* * * * *

(l) * * *

(1) If you monitor compliance with the HCl emissions limit by operating an HCl CEMS, you must do so in accordance with Performance Specification (PS) 15 or PS 18 of appendix B to part 60 of this chapter, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to part 60 of this chapter. You must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to part 60 of this chapter except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. If you choose to install and operate an HCl CEMS in accordance with PS 18, you must operate, maintain, and quality assure the HCl CEMS using the associated Procedure 6 of appendix F to part 60 of this chapter. For any performance specification that you use, you must use Method 321 of appendix A to this part as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (l)(1)(i) and (ii) of this section apply to HCl CEMS other than those installed and certified under PS 15 or PS 18.

* * * * *

(3) If the source is equipped with a wet or dry scrubber or tray tower, and you choose to monitor SO_2 emissions, monitor SO_2 emissions continuously according to the requirements of § 60.63(e) and (f) of this chapter. If SO_2 levels increase above the 30-day rolling average SO_2 operating limit established during your performance test by 10 percent or more, you must:

(i) As soon as possible but no later than 30 days after you exceed the established SO_2 value conduct an inspection and take corrective action to return the SO_2 emissions to within the operating limit; and

(ii) Within 90 days of the exceedance or at the time of the next compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl

emissions limit and to verify or re-establish the SO_2 CEMS operating limit.

* * * * *

■ 7. Section 63.1354 is amended by:
■ a. Revising paragraphs (b)(9) introductory text and (b)(9)(vi);
■ b. Redesignating paragraph (b)(9)(viii) as paragraph (b)(11)(i) introductory text and revising newly redesignated paragraph (b)(11)(i);
■ c. Adding paragraphs (b)(11)(i)(A) through (C);
■ d. Redesignating paragraph (b)(9)(ix) as paragraph (b)(11)(ii);
■ e. Redesignating paragraph (b)(9)(x) as paragraph (b)(12) and revising newly redesignated paragraph (b)(12); and
■ f. Revising paragraphs (b)(10) and (c).

The revisions read as follows:

§ 63.1354 Reporting requirements.

* * * * *

(b) * * *

(9) The owner or operator shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in § 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in § 63.10(e)(3)(vi). In addition, the summary report shall include:

* * * * *

(vi) For each PM CPMS, HCl, Hg, and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.

* * * * *

(10) If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

(11)(i) You must submit the information specified in paragraphs (b)(11)(i)(A) and (B) of this section no later than 60 days following the initial performance test. All reports must be signed by a responsible official.

(A) The initial performance test data as recorded under § 63.1349(a).

(B) The values for the site-specific operating limits or parameters established pursuant to § 63.1349(b)(1), (3), (6), (7), and (8), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.

(C) As of December 31, 2011, and within 60 days after the date of completing each performance evaluation or test, as defined in § 63.2, conducted to demonstrate compliance with any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically via CEDRI and by using the Electronic Reporting Tool (ERT) (see *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*). For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 63.13.

* * * * *

(12) All reports required by this subpart not subject to the requirements in paragraphs (b)(9) introductory text and (b)(11)(i) of this section must be sent to the Administrator at the appropriate address listed in § 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (*e.g.,* by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (b)(9) introductory text and (b)(11)(i) of this section in paper format.

(c) For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by § 63.1354(b)(9). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.1348(d), including actions taken to correct a malfunction.

■ 8. Section 63.1355 is amended by revising paragraph (e) to read as follows:

§ 63.1355 Recordkeeping requirements.

* * * * *

(e) You must keep records of the daily clinker production rates according to the clinker production monitoring requirements in § 63.1350(d).

* * * * *

■ 9. Table 1 to subpart LLL of part 63 is amended by adding the entry ''63.10(e)(3)(v)'' in alphanumeric order to read as follows:

TABLE 1 TO SUBPART LLL OF PART 63—APPLICABILITY OF GENERAL PROVISIONS

Citation	Requirement	Applies to subpart LLL	Explanation
*	*	*	*
63.10(e)(3)(v)	Due Dates for Excess Emissions and No CMS Performance Reports.		§ 63.1354(b)(9) specifies due date.
*	*	*	*

■ 10. Add table 2 to subpart LLL of part 63 to read as follows:

TABLE 2 TO SUBPART LLL OF PART 63—1989 TOXIC EQUIVALENCY FACTORS (TEFS)

Dioxins/Furans	TEFs 1989
2,3,7,8–TCDD	1
1,2,3,7,8-PeCDD	0.5
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.001
2,3,7,8–TCDF	0.1
1,2,3,7,8-PeCDF	0.05
2,3,4,7,8-PeCDF	0.5
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01
OCDF	0.001

[FR Doc. 2018–15718 Filed 7–24–18; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[EPA–HQ–OAR–2017–0548; FRL–9981–17–OAR]

RIN 2060–AU13

Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards—San Antonio, Texas Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is establishing initial air quality designations for the eight counties in the San Antonio-New Braunfels, Texas Core Based Statistical Area (CBSA) for the 2015 primary and secondary national ambient air quality standards (NAAQS) for ozone. The EPA is designating Bexar County as the San Antonio, Texas nonattainment area and the remaining seven counties as attainment/unclassifiable areas. The San Antonio, Texas nonattainment area is also being classified as Marginal by operation of law according to the severity of its air quality problem. Of the five classification categories, Marginal nonattainment areas have ozone levels that are closest to the ozone NAAQS at the time of designation. This action completes the initial designations for the 2015 ozone NAAQS. The EPA designated all other areas of the country for the 2015 ozone NAAQS in actions signed by the Administrator on November 6, 2017, and April 30, 2018.

DATES: The effective date of this rule is September 24, 2018.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2017–0548. All documents in the docket are listed in the index at *http://www.regulations.gov.* Although listed in the index, some information is not publicly available, *i.e.,* Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in the docket or in hard copy at the EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Office of Air and Radiation Docket and Information Center is (202) 566–1742.

In addition, the EPA has established a website for rulemakings for the initial area designations for the 2015 ozone NAAQS at *https://www.epa.gov/ozone-designations.* The website includes the EPA's final designations, as well as designation recommendation letters from states and tribes, the EPA's 120-letters notifying the states whether the EPA intends to modify the state's recommendation, technical support documents, responses to comments and other related technical information.

The public may also inspect this rule and state-specific technical support information in hard copy at EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733.

FOR FURTHER INFORMATION CONTACT: Denise Scott, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–01, Research Triangle Park, NC 27711, phone number (919) 541–4280, email: *scott.denise@epa.gov* or Carrie Paige, U.S. Environmental Protection Agency, Region 6, Mail Code: 6MM–AB, 445 Ross Avenue, Dallas, TX 75202, telephone (214) 665–6521, email: *paige.carrie@epa.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

The following is an outline of the preamble.

I. Preamble Glossary of Terms and Acronyms

The following are abbreviations of terms used in the preamble.

APA Administrative Procedure Act
CAA Clean Air Act
CFR Code of Federal Regulations
CBSA Core Based Statistical Area
DC District of Columbia
EPA Environmental Protection Agency
FR Federal Register
NAAQS National Ambient Air Quality Standards
NO_X Nitrogen Oxides
NTTAA National Technology Transfer and Advancement Act
PPM Parts per million
RFA Regulatory Flexibility Act
UMRA Unfunded Mandate Reform Act of 1995
TAR Tribal Authority Rule
U.S. United States
U.S.C. United States Code
VOC Volatile Organic Compounds

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2016–0678; FRL–9988–71–OAR]

RIN 2060–AT71

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Surface Coating of Wood Building Products source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing periods of startup, shutdown, and malfunction (SSM). We are finalizing our proposed determination that the risks are acceptable and that the current NESHAP provides an ample margin of safety to protect public health. We identified no new cost-effective controls under the technology review to achieve further emissions reductions. These final amendments include provisions regarding electronic reporting, adding an alternative compliance equation under the current standards, and technical and editorial changes. This action also finalizes a new EPA test method to measure isocyanate compounds in certain surface coatings. These amendments are being made under the authority of the Clean Air Act (CAA) and will improve the effectiveness of the rule. The amendments are environmentally neutral.

DATES: This final rule is effective on March 4, 2019. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of March 4, 2019.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2016–0678. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. John Bradfield, Sector Policies and Programs Division (E143–03), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–3062; fax number: (919) 541–0516; and email address: *bradfield.john@epa.gov.* For specific information regarding the risk modeling methodology, contact Mr. James Hirtz, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0881; fax number: (919) 541–0840; and email address: *hirtz.james@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Mail Code 2221A, Washington, DC 20460; telephone number: (202) 564–1395; and email address: *cox.john@epa.gov.*

SUPPLEMENTARY INFORMATION: *Preamble acronyms and abbreviations.* We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

ANSI American National Standards Institute
ASTM American Society for Testing and Materials
ATSDR Agency for Toxic Substances and Disease Registry
CAA Clean Air Act
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
CFR Code of Federal Regulations
CORE Central Operations and Resources
CRA Congressional Review Act
EJ environmental justice
E.O. Executive Order
EPA Environmental Protection Agency
ERT Electronic Reporting Tool
EST Eastern Standard Time
FTIR Fourier Transform Infrared
HAP hazardous air pollutant(s)
HDI hexamethylene-1,6-diisocyanate
HI hazard index
HQ hazard quotient
IBR incorporation by reference
ICR information collection request
IRIS Integrated Risk Information System
km kilometers
MACT maximum achievable control technology
MDI methylene diphenyl diisocyanate
MI methyl isocyanate
MIR maximum individual risk
NAICS North American Industry Classification System
NCASI National Council for Air and Stream Improvement, Inc.
NEI National Emissions Inventory
NESHAP National Emission Standards for Hazardous Air Pollutants
No. number
NRDC Natural Resources Defense Council
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PDF portable document format
POM polycyclic organic matter
PRA Paperwork Reduction Act
QA quality assurance
QC quality control
REL reference exposure level
RFA Regulatory Flexibility Act
RIN Regulatory Information Number
RTR risk and technology review
SSM startup, shutdown, and malfunction
TDI 2,4-toluene diisocyanate
TOSHI target organ-specific hazard index
tpy tons per year
UMRA Unfunded Mandates Reform Act
U.S. United States
U.S.C. United States Code
UV ultraviolet
VCS voluntary consensus standards
WebFIRE Web Factor Information Retrieval System

Background information. On May 16, 2018, the EPA proposed revisions to the Surface Coating of Wood Building Products NESHAP based on our RTR. In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments are available in *Response to Public Comments on May 16, 2018 Proposal, December 2018,* Docket ID No. EPA–HQ–OAR–2016–0678. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source category	NAICS [1] code
Surface Coating of Wood Building Products.	321211, 321212, 321218, 321219, 321911, 321999.

[1] North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://www.epa.gov/stationary-sources-air-pollution/surface-coating-wood-building-products-national-emission-standard-1.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under CAA section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by May 3, 2019. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a

rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including but not limited to those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 83 FR 2274.

B. What is the Surface Coating of Wood Building Products source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA promulgated the Surface Coating of Wood Building Products NESHAP on May 28, 2003 (See 68 FR 31746). The standards are codified at 40 CFR part 63, subpart QQQQ. The Wood Building Products Surface Coating industry consists of facilities that are engaged in the surface coating of wood building products, which means the application of coatings using, for example, roll coaters or curtain coaters in the finishing or laminating of any wood building product that contains more than 50 percent by weight wood or wood fiber, excluding the weight of any glass components, and is used in the construction, either interior or exterior, of a residential, commercial, or institutional building. Regulated operations include all processes and process units incorporating wood building products surface coating operations. The source category covered by this MACT standard currently includes 57 facilities.

C. What changes did we propose for the Surface Coating of Wood Building Products source category in our May 16, 2018, proposal?

On May 16, 2018, the EPA published a proposed rule in the **Federal Register** for the Surface Coating of Wood Building Products NESHAP, 40 CFR part 63, subpart QQQQ, that took into consideration the RTR analyses. In the proposed rule, we proposed revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We also proposed various other changes, including an alternative compliance calculation, electronic submittal of notifications, compliance reports, and performance test reports, a new EPA test method, IBR of several test methods, and various technical and editorial changes. Additionally, we requested comment on repeat emissions testing requirements for facilities that demonstrate compliance with the standards using add-on control devices and for any facilities using the alternative compliance equation under the emission rate without add-on controls option.

III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Surface Coating of Wood Building Products source category. This action also finalizes other changes to the NESHAP, including an alternative compliance calculation equation that relies on periodic emissions testing; electronic submittal of notifications of compliance status, semiannual compliance reports, and performance test reports; a new EPA test method for isocyanates, EPA Method 326; IBR of several test methods (listed in section IV below); and various technical and editorial changes.

A. What are the final rule amendments based on the risk review for the Surface Coating of Wood Building Products source category?

The EPA proposed no changes to the 40 CFR part 63, subpart QQQQ NESHAP based on the risk review conducted pursuant to CAA section 112(f). We are finalizing our proposed determination that risks from the source category are acceptable, considering all of the health information and factors evaluated, and also considering risk estimation uncertainty. We are also finalizing our proposed determination that revisions to the current standards are not necessary to reduce risk to an acceptable level, to provide an ample margin of safety to protect public health, or to prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that affected our determinations. Therefore, we are not

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

requiring additional controls and, thus, are not making any revisions to the existing standards under CAA section 112(f).

B. What are the final rule amendments based on the technology review for the Surface Coating of Wood Building Products source category?

We determined that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. The EPA received no new data or other information during the public comment period that affected our determinations. Therefore, we are not finalizing revisions to the MACT standards under CAA section 112(d)(6).

C. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 ''General Provisions'' regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We have eliminated the SSM exemption in this rule. Consistent with *Sierra Club* v. *EPA,* the EPA has established standards in this rule that apply at all times. We have also revised Table 4 to Subpart QQQQ of Part 63 (the General Provisions applicability table) in several respects, as is explained in more detail below in section IV.C. For example, we have eliminated the incorporation of the General Provisions' requirement that the source develop an SSM plan. We have also eliminated and revised certain recordkeeping and reporting that is related to the SSM exemption as described in detail in the proposal and summarized below in section IV.C.

D. What other changes have been made to the NESHAP?

Other changes to the NESHAP that do not fall into the categories in the previous section include:

1. *Alternative compliance equation.* As proposed in response to a request for an alternative method of demonstrating compliance, we have amended the rule to add an alternative equation within the requirements for facilities meeting the ''emission rate without add-on controls'' compliance option under the current standards. The alternative is discussed further in section IV.D of this preamble.

2. *Emissions testing.* In response to comments and emissions tests discussed at proposal, we have amended the allowable compliance tests in the rule. Emissions testing is discussed further in section IV.E of this preamble.

3. *Electronic reporting.* As discussed at proposal, we are finalizing amendments to the reporting requirements in the rule to require electronic reporting for notifications of compliance status, compliance test reports, and semiannual reports. Electronic reporting is discussed further in section IV.F of this preamble.

4. *EPA Test Method 326.* As discussed at proposal, we are finalizing a new test method for isocyanate emissions. EPA Test Method 326 is discussed further in section IV.G and is included in appendix A to part 63 of this preamble.

5. *IBR under 1 CFR part 51.* We are incorporating several test methods by reference, as discussed further in section IV.H of this preamble.

6. *Technical and editorial changes.* We are finalizing technical and editorial changes, as discussed further in section IV.I of this preamble.

E. What are the effective and compliance dates of the standards?

The revisions to the MACT standards being promulgated in this action are effective on March 4, 2019. The compliance date for existing affected sources to comply with the revised requirements is no later than 180 days after March 4, 2019. Affected sources that commenced construction or reconstruction after May 16, 2018, are new sources. New sources must comply with the all of the standards immediately upon the effective date of the standard, March 4, 2019], or upon startup, whichever is later. In section IV.F of this preamble on Electronic Reporting, we discuss a semiannual reporting template that will become the required form for those reports 1 year after it is posted in the EPA's Compliance and Emissions Data Reporting Interface (CEDRI). The EPA expects to post the form on March 4, 2019. Consequently, 1 year or more after March 4, 2019, facilities subject to this standard will need to begin using this form for semiannual reports.

The EPA is finalizing that existing affected sources must comply with the amendments in this rulemaking no later than 180 days after March 4, 2019. The EPA is also finalizing that affected sources that commence construction or reconstruction after March 4, 2019 must comply with all requirements of the subpart, including the amendments being finalized, no later than March 4, 2019 or upon startup, whichever is later. All affected existing facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart QQQQ, until the applicable compliance date of the amended rule. The final action is not a ''major rule'' as defined by 5 U.S.C. 804(2), so the effective date of the final rule is the promulgation date as specified in CAA sections 112(d)(10) and 112(f)(3). For existing sources, we are finalizing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart QQQQ. As discussed elsewhere in this preamble, we are adding a requirement that the notification of compliance status, performance test results, and the semiannual reports using the new template be submitted electronically. We are also changing the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Additionally, we are adding an optional new compliance demonstration equation that adds flexibility for meeting the standard, but this change does not affect ongoing compliance. Our experience with similar industries that are required to convert reporting mechanisms, install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, reliably employ electronic reporting, and convert logistics of reporting processes to different time-reporting parameters, shows that a time period of a minimum of 90 days, and more typically, 180 days, is generally necessary to successfully complete these changes. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; adjust parameter monitoring and recording systems to accommodate revisions; and update their operations to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of

dates would impose. From our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable, and, thus, is finalizing that existing affected sources be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date.

IV. What is the rationale for our final decisions and amendments for the Surface Coating of Wood Building Products source category?

For each issue, this section provides a description of what we proposed and what we are finalizing for the issue, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket, Docket ID No. EPA–HQ–OAR–2016–0678.

A. Residual Risk Review for the Surface Coating of Wood Building Products Source Category

1. What did we propose pursuant to CAA section 112(f) for the Surface Coating of Wood Building Products source category?

For the 40 CFR part 63, subpart QQQQ category risk assessment conducted at proposal, the EPA estimated risks based on actual and allowable emissions from wood building products surface coating sources. Allowable emissions at proposal were estimated to be equal to actual emissions. The estimated inhalation cancer risk to the individual most exposed to emissions from the source category was 6-in-1 million at proposal, at one facility. The assessment showed that approximately 800 people faced an increased cancer risk greater than 1-in-1 million due to inhalation exposure to HAP emissions from this source category. The risk analysis at proposal indicated very low cancer incidence (0.0006 excess cancer cases per year, or one excess case every 1,667 years), as well as low potential for adverse chronic noncancer health effects with a hazard index (HI) of 0.05 for both actual and allowable emissions. The acute screening assessment indicated two facilities with a maximum hazard quotient (HQ) equal to 1 based upon a reference exposure level (REL) for formaldehyde. Therefore, we found there was little potential concern for chronic or acute noncancer health impacts. The multipathway risk assessment indicated no significant potential for exposure from persistent bio-accumulative HAP (PB–HAP) emissions from the source category.

Considering all of the health risk information, the EPA proposed that the risks from the Surface Coating of Wood Building Products source category were acceptable. Although we proposed acceptable risk, risk estimates for approximately 800 people in the exposed population were above 1-in-1 million, caused by formaldehyde emissions from one facility. The maximum acute risk at proposal was an HQ of 1, also associated with formaldehyde from the same facility with the highest chronic risk. As a result, we further considered whether the MACT standards for this source category provide an ample margin of safety to protect public health. Our technology review did not identify any new practices, controls, or process options that were being used in this industry, or in other industries, that would be cost effective and result in further reduction of formaldehyde emissions. Because no new controls, technologies, processes, or work practices were identified to reduce formaldehyde emissions and the risk assessment determined that the health risks associated with HAP emissions remaining after implementation of the Surface Coating of Wood Building Products MACT were acceptable, we proposed that the current standards protect public health with an ample margin of safety.

2. How did the risk review change for the Surface Coating of Wood Building Products source category?

In response to comments on the proposed 40 CFR part 63, subpart QQQQ, RTR, we reviewed our facility list and made adjustments, adding five facilities and removing four facilities. The five facilities added had responded to a separate EPA survey, indicating that 40 CFR part 63, subpart QQQQ applied to their facilities. The HAP emissions inventory for the source category was revised to reflect these changes to the facility list. Further, we found that 40 CFR part 63, subpart QQQQ did not apply to four facilities. As such, we removed these four facilities from the facility list. In response to comments received, we also reviewed our HAP data and added polycyclic organic matter (POM) to the HAP emission inventory for the source category. At proposal, we set allowable HAP emissions as being equal to actual HAP emissions due to the nature of compliance choices made by facilities in the category. In response to comments, we reviewed this approach and decided to estimate allowable emissions using a 1.6 multiple of actual emissions. The multiplier was derived from source category capacity usage information in the U.S. Census of Manufacturers. In response to comments, we also decided to use the more conservative multiplier of 10 times actual emissions to model acute health impacts. See the *Addendum to Preparation of the Residual Risk Modeling Input File for Subpart QQQQ,* in the docket for this rule, EPA–HQ–OAR–2016–0678, for more details regarding these changes. In response to comments received, we also considered whether a refined risk modeling analysis would better inform the EPA about the impact on disadvantaged communities from HAP emissions from the source category. The changes in the facility list, HAP inventory, allowable and acute emission estimates, and environmental justice (EJ) concerns led the EPA to prepare and run a new modeling file and prepare a revised risk assessment, *Residual Risk Assessment for the Surface Coating of Wood Building Products Source Category in Support of the 2018 Risk and Technology Review Final Rule,* which is available in the docket for the rule.

The revised risk assessment for the source category indicated that human health impacts for both chronic and acute risks were lower than stated at proposal. The results of the risk assessment showed that risks based on actual emissions did not exceed a maximum individual risk (MIR) of 1-in-1 million for cancer and resulted in an HI of 0.02 for noncancer. The results of the final risk assessment also showed lower risks based upon allowable emissions with a cancer MIR of 1-in-1 million and a noncancer HI of 0.03. The revised risk assessment also showed lower acute risks than stated at proposal with a maximum acute noncancer HQ of 0.6.

Table 2 of this preamble provides an overall summary of the results of the inhalation risk assessment, as discussed in this section of this preamble. See the *Addendum to Preparation of the Residual Risk Modeling Input File for Subpart QQQQ,* in the docket for this rule, Docket ID No. EPA–HQ–OAR–2016–0678, for more details regarding preparation of the modeling file.

TABLE 2—SURFACE COATING OF WOOD BUILDING PRODUCTS INHALATION RISK ASSESSMENT RESULTS [1]

Risk assessment	Number of facilities [2]	Maximum individual cancer risk (in 1 million) [3]	Estimated population at increased risk of cancer ≥1-in-1 million	Estimated annual cancer incidence (cases per year)	Maximum chronic noncancer TOSHI [4]	Maximum screening acute noncancer HQ [5]
Baseline Actual Emissions:						
Source Category	50	<1	0	0.0004	0.02	0.6
Baseline Allowable Emissions:						
Source Category	50	1	700	0.0007	0.03	

[1] Based on actual and allowable emissions for facilities subject to 40 CFR part 63, subpart QQQQ. See *Residual Risk Assessment for the Surface Coating of Wood Building Products Source Category in Support of the 2018 Risk and Technology Review Final Rule,* in the docket for this rule, EPA–HQ–OAR–2016–0678, for more details.

[2] Number of facilities evaluated in the risk assessment. Seven facilities in the category reported no HAP emissions from coatings subject to 40 CFR part 63, subpart QQQQ. Facilities that did not emit any HAP subject to 40 CFR part 63, subpart QQQQ were only modeled for whole-facility HAP emissions. Two facilities in the source category reported zero HAP emissions facility-wide and were not modeled.

[3] Maximum individual excess lifetime cancer risk due to HAP emissions from the source category facilities. The risk driver for the source category is naphthalene.

[4] Maximum target organ-specific hazard index (TOSHI). The target organ with the highest TOSHI for the source category is the respiratory system. The risk drivers for the source category are triethylamine and naphthalene.

[5] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of HQ values. HQ values shown use the lowest available acute threshold value, which, in most cases, is the REL. When an HQ exceeds 1 in the acute risk screening assessment, we conduct further analysis to determine the highest off-site impact. The maximum acute noncancer risk driver is formaldehyde.

The inhalation risk modeling performed to estimate risks based on actual and allowable emissions relied primarily on emissions data from the National Emissions Inventory (NEI). The results of the inhalation cancer risk assessment, as shown in Table 2 of this preamble, indicate that the MIR could be up to 1-in-1 million for allowable emissions under the current standard, with naphthalene emissions from solvent evaporation associated with spray paint operations as the major contributor to the MIR. The total estimated cancer incidence from wood building product coating sources based on actual emission levels is 0.0004 excess cancer cases per year or one case every 2,500 years, with emissions of naphthalene and ethylbenzene contributing to the cancer incidence. In addition, we estimate that approximately 700 people have cancer risks at 1-in-1 million based on allowable emissions.

The maximum modeled chronic noncancer HI (TOSHI) value for the source category based on actual emissions is estimated to be 0.02, with emissions of triethylamine and naphthalene contributing to the TOSHI. The target organ affected is the respiratory system. No people are estimated to have a noncancer HI above 1 as a result of emissions from this source category.

3. What key comments did we receive on the risk review, and what are our responses?

We received two comments on our proposed risk assessment. One stakeholder supported our risk assessment proposal and further suggested that the Integrated Risk Information System (IRIS) dose response factors for formaldehyde, the principle risk driver in the category, were overly conservative and should be re-evaluated. Another stakeholder disagreed with our assessment, characterizing it as arbitrary because (1) it exceeded the 1-in-1 million CAA presumption of acceptability from CAA section 112(f)(2), and (2) the health impacts of the risk above 1-in-1 million were concentrated in minority and lower income neighborhoods, and, thus, creating what the commenter considered an environmental justice issue.

As stated in our response to comments,[2] we found the risk from HAP exposure from emission sources in this category to be acceptable. The cancer dose-response value used in the risk assessment for formaldehyde is the current peer reviewed IRIS value. The chronic noncancer dose-response value used for formaldehyde is from the Agency for Toxic Substances and Disease Registry (ATSDR). At the time this analysis was performed, these values were deemed to represent the best science.

Regarding the comments to risk on disadvantaged communities, under Executive Order 12898, the EPA is directed to the greatest extent practicable and permitted by law, to make EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations in the U.S. Consistent with Executive Order 12898 and the Presidential Memorandum [3] that accompanies it, the EPA's EJ policies promote justice by focusing attention and EPA efforts on addressing the types of EJ harms and risks that are prevalent among minority, low-income, and indigenous populations. Executive Order 12898 and the EPA's EJ policies do not mandate particular outcomes from an action, but they require that decisions involving the action be informed by a consideration of EJ issues. With respect to this rule, the EPA found that the original NESHAP meets the CAA section 112(f)(2) standard for providing an ample margin of safety for all populations in close proximity to these sources, including minority and low-income populations.

4. What is the rationale for our final approach and final decisions for the risk review?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using ''a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of ''approximately 1-in-10 thousand'' (see 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability

[2] See *Response to Public Comments on May 16, 2018 Proposal, December 2018,* Docket ID No. EPA–HQ–OAR–2016–0678.

[3] Memorandum for the Heads of All Departments and Agencies from William Clinton, February 11, 1994. *Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*

determination, including the cancer MIR, cancer incidence, the maximum cancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

Our final risk assessment was revised based on comments we received at proposal. It included updated facility information, HAP emissions, and production information (see section IV.A.2 of this preamble). The total emissions of HAP for the source category are approximately 270 tpy. The results of the chronic inhalation cancer risk assessment based on actual emissions, the total estimated cancer incidence from allowable emissions in this source category, and the acute HQ are discussed in section IV.A.2 and in Table 2 of this preamble. In evaluating the potential for multipathway effects from PB–HAP, including carcinogenic emissions of arsenic and POM and non-carcinogenic emissions of cadmium, lead, and mercury from the source category, the risk assessment indicates no significant potential for multipathway effects.

We concluded, based on all the health risk information and factors discussed at proposal, that the risks from the Surface Coating of Wood Building Products source category were acceptable. As noted above, the information in the final risk assessment shows lower risk indicators than indicated at proposal. Consequently, the EPA is finalizing an acceptable risk determination for the category. We conducted an analysis to determine if the current emissions standards provide an ample margin of safety to protect public health. Under the ample margin of safety analysis,[4] the EPA considers all health factors evaluated in the risk assessment and evaluates the cost and feasibility of available control technologies and other measures (including the controls, measures, and costs reviewed under the technology review) that could be applied to this source category to further reduce the risks (or potential risks) due to emissions of HAP identified in our risk assessment. In this analysis, we considered the results of the technology review, risk assessment, and other aspects of our MACT rule review to determine whether there are any cost-effective controls or other measures that would reduce emissions further to provide an ample margin of safety with respect to the risks associated with these emissions.

[4] See CAA section 112(f)(2).

As noted, we consider the risks from this source category to be acceptable. However, risk estimates for approximately 700 people in the exposed population are at 1-in-1 million, based on allowable naphthalene emissions from one facility. As a result, we further considered whether the MACT standards for this source category provide an ample margin of safety to protect public health.

At proposal, our ample margin of safety review was informed by the results of our technology review which did not identify any developments in practices, controls, or process options that are being used in this industry, or in other industries, that would be cost effective and result in further emissions reductions. Similarly, our review of the operating permits for major sources subject to the Surface Coating of Wood Building Products MACT did not reveal any facilities with limits set below the current new or existing source limits (Tables 1 and 2 to Subpart QQQQ of Part 63). Limits set below the current standards would have been an indication that improved controls or lower emission-compliant coatings were available. Additionally, our review of the Reasonably Available Control Technology/Best Available Control Technology/Lowest Achievable Emission Rate Clearinghouse identified three sources that are potentially covered under 40 CFR part 63, subpart QQQQ, but none contained new control methods. Because no developments in controls, technologies, processes, or work practices were identified to reduce naphthalene emissions and the risk assessment determined that the health risks associated with HAP emissions remaining after implementation of the Surface Coating of Wood Building Products MACT were acceptable, we are finalizing our risk review determination that the current standards protect public health with an ample margin of safety.

B. Technology Review for the Surface Coating of Wood Building Products Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Surface Coating of Wood Building Products source category?

Our review of the developments in technology for the Surface Coating of Wood Building Products source category did not reveal any changes in practices, processes, and controls. In the original NESHAP, we noted that the most prevalent form of emission control for surface coating of wood building products is the use of low-volatile organic compounds and low-HAP coatings, such as waterborne or ultraviolet (UV)-cured coatings. That continues to be the prevalent compliance approach, with less than 10 percent of source category facilities using add-on control to reduce HAP emissions. Because our review did not identify any developments in practices, processes, or controls to further reduce emissions in the category beyond the level required by the current NESHAP, we proposed that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6).

2. How did the technology review change for the Surface Coating of Wood Building Products source category?

The technology review did not change from proposal. Therefore, we are finalizing our proposed determination that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6).

3. What key comments did we receive on the technology review, and what are our responses?

We received no comments that identified improved control technology, work practices, operational procedures, process changes, or pollution prevention approaches to reduce emissions in the category since promulgation of the current NESHAP. We received two comments on our proposed technology review. One stakeholder supported our review, while another stakeholder disagreed with our assessment, holding that the new coating application which led to the proposal of an alternative compliance equation constituted a change that should have been adopted across the category (see Docket ID No. EPA–HQ–OAR–2016–0678).

As stated in our comment response (see Docket ID No. EPA–HQ–OAR–2016–0678), we are finalizing the conclusion that there have been no advances in practices, processes, or controls since promulgation in 2003 that justify changes to the stringency of the standards for 40 CFR part 63, subpart QQQQ sources.

At proposal, we explained how the coating planned for use by the facility submitting the alternative monitoring request is similar to other low-HAP coatings in that it uses a liquid catalyst to affect the same type of chemical and physical changes as UV light in the UV-curable coatings, which are low-HAP coatings that predate and were considered during development of the original 40 CFR part 63, subpart QQQQ NESHAP. Regardless of this explanation, we see how the commenter

may have misconstrued some of the discussion in the proposal's supporting memorandum regarding the coating technology and the new compliance equation. The updated memorandum, *Technology Review for the Surface Coating of Wood Building Products Source Category—Final Rule,* available in the docket for this rule, EPA–HQ–OAR–2016–0678, clarifies the information used for the technology review. The technology basis of the coating technology for which the new compliance equation we finalize here is not broadly applicable. It is simply one of many technology approaches that can be used to meet the standard. Consequently, we did not propose the alternate compliance equation as a ''development'' under CAA section 112(d)(6), nor are we finalizing it as such. Even if the EPA were to consider the new coating to be a development within the meaning of CAA section 112(d)(6), the EPA has discretion to determine when it is ''necessary'' to revise emission standards under the statute. In this case, it would not be necessary to revise the numeric emission standards in Tables 1 or 2 to Subpart QQQQ of Part 63, in order to accommodate the alternative monitoring request from one facility that fits within the overarching compliance options included in the rule (*i.e.,* the ''emission rate without add-on controls'' option).

4. What is the rationale for our final approach for the technology review?

Our technology review did not identify any changes in practices, processes, or control technologies that would reduce emissions in this category. We did not identify any control equipment not previously identified; improvements to existing controls; work practices, process changes, or operational procedures not previously considered; or any new pollution prevention alternatives for this same category. We also did not find any changes in the cost of applying controls previously considered in this same category. Consequently, we have determined that no revisions to the NESHAP are necessary pursuant to CAA section 112(d)(6).

C. SSM

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 General Provisions regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We are finalizing the elimination of the SSM exemption in this rule. The SSM provisions appear at 40 CFR 63.4700, 40 CFR 63.4720, and in Table 4 to Subpart QQQQ of Part 63. Consistent with *Sierra Club* v. *EPA,* we are finalizing that the standards in this rule apply at all times. We are also finalizing several revisions to Table 4 (the General Provisions Applicability Table), as explained in more detail below. For example, we are eliminating incorporation of the General Provisions' requirement that the source develop an SSM plan. We also are eliminating and revising certain recordkeeping and reporting requirements related to the SSM exemption, as further described below.

The EPA has attempted to ensure that the provisions we are eliminating are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. The EPA believes the removal of the SSM exemption creates no additional burden to facilities regulated under the Surface Coating of Wood Building Products NESHAP. Deviations addressed in current SSM plans are now required to be reported in the semiannual compliance report (40 CFR 63.4720). Facilities no longer need to develop an SSM plan or keep it current (Table 4 to Subpart QQQQ of Part 63). Facilities also no longer have to file SSM reports for deviations not described in the their SSM plan (40 CFR 63.4720(c)(2)).

Periods of startup and shutdown. In finalizing the standards in this rule, the EPA has taken into account startup and shutdown periods and, for the reasons explained below, is not finalizing alternate standards for those periods.

For add-on control systems, the Surface Coating of Wood Building Products NESHAP requires the measurement of thermal oxidizer operating temperature or catalytic oxidizer average temperature across the catalyst bed as well as other types of parameter monitoring. Parameter limits now apply at all times, including during periods of startup and shutdown. The Surface Coating of Wood Building Products NESHAP requires thermal oxidizer or catalytic oxidizer operating temperature and operating parameters for other add-on control devices to be recorded at least once every 15 minutes. The Surface Coating of Wood Building Products NESHAP specifies in 40 CFR 63.4763(c) that if an operating parameter is out of the allowed range, this is a deviation from the operating limit and must be reported as specified in 40 CFR 63.4710(c)(6) and 63.4720(a)(7).

Our permit review of the facilities using add-on control as a compliance approach indicated that all were required, by permit, to have their control system in operation during all time periods when coating processes were operational. The 2003 rule requires compliance based on a 12-month rolling average emissions calculation. Periods of startup and shutdown were included, but, because of operational requirements in the category, are a very small component of the emissions calculation and have little, if any, impact on the 12-month rolling average. Therefore, we are not finalizing separate standards for startup and/or shutdown periods.

Periods of malfunction. Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead, they are, by definition, sudden, infrequent, and not reasonably preventable failures of emissions control, process, or monitoring equipment. (40 CFR 63.2, definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards and this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016). Under CAA section 112, emissions standards for new sources must be no less stringent than the level ''achieved'' by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation ''achieved'' by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the Agency to consider malfunctions in determining the level ''achieved'' by the best performing sources when setting emission standards. As the Court has recognized, the phrase ''average emissions limitation achieved by the best performing 12 percent of'' sources ''says nothing about how the performance of the best units is to be calculated.'' *National Association of Clean Water Agencies* v. *EPA,* 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the Agency to consider malfunctions as part of that analysis. The EPA is not required to treat a malfunction in the same manner as the type of variation in performance

that occurs during routine operations of a source. A malfunction is a failure of the source to perform in ''normal or usual manner,'' and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

As the Court recognized in *U.S. Sugar Corporation,* accounting for malfunctions in setting standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. *Id.* at 608 (''the EPA would have to conceive of a standard that could apply equally to the wide range of possible boiler malfunctions, ranging from an explosion to minor mechanical defects. Any possible standard is likely to be hopelessly generic to govern such a wide array of circumstances.''). As such, the performance of units that are malfunctioning is not ''reasonably'' foreseeable. See, *e.g., Sierra Club* v. *EPA,* 167 F.3d 658, 662 (D.C. Cir. 1999) (''The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.' ''). See also, *Weyerhaeuser* v. *Costle,* 590 F.2d 1011, 1058 (D.C. Cir. 1978) (''In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.''). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible. For example, in the Petroleum Refinery Sector RTR, the EPA established a work practice standard for unique types of malfunction that result in releases from pressure relief devices or emergency flaring events because information regarding petroleum refinery sources was available to determine that such work practices reflected the level of control that applies to the best performing sources in that source category. See 80 FR 75178, 75211–75214 (December 1, 2015). The EPA considered whether circumstances warrant setting work practice standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions.

In the event that a source fails to comply with the applicable CAA section 112 standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112 standard was, in fact, sudden, infrequent, not reasonably preventable, and was not instead caused, in part, by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction).

If the EPA determines in a particular case that an enforcement action against a source for violation of an emission standard is warranted, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate.

In summary, the EPA's interpretation of the CAA and, in particular, CAA section 112 is reasonable and encourages practices that will avoid malfunctions. Administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply and can accommodate those situations. *U.S. Sugar Corporation* v. *EPA,* 830 F.3d 579, 606–610 (2016).

1. General Duty

We are finalizing revisions to the General Provisions table (Table 4) entry for 40 CFR 63.6(e)(1) and (2) by redesignating it as 40 CFR 63.6(e)(1)(i) and changing the ''yes'' in column 3 to a ''no.'' Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate considering the elimination of the SSM exemption. We are instead adding general duty regulatory text at 40 CFR 63.4700(b) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The previous language in 40 CFR 63.6(e)(1)(i) characterized what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations and SSM events in describing the general duty. Therefore, the language the EPA is finalizing for 40 CFR 63.4700(b) does not include that language from 40 CFR 63.6(e)(1).

We are also revising the General Provisions table (Table 4) to add an entry for 40 CFR 63.6(e)(1)(ii) and include a ''no'' in column 3. Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.4700(b). We are also finalizing revisions to the General Provisions table (Table 4) to add an entry for 40 CFR 63.6(e)(1)(iii) and include a ''yes'' in column 3, which became necessary with the elimination of the SSM. Finally, we are finalizing revisions to the General Provisions table (Table 4) to add an entry for 40 CFR 63.6(e)(2) and include a ''no'' in column 3. This paragraph is reserved and is not applicable to 40 CFR part 63, subpart QQQQ.

2. SSM Plan

We are finalizing revisions to the General Provisions table (Table 4) to add an entry for 40 CFR 63.6(e)(3) and

include a ''no'' in column 3. Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA is finalizing removal of the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance, and, thus, the SSM plan requirements are no longer necessary.

3. Compliance With Standards

We are finalizing revisions to the General Provisions table (Table 4) entries for 40 CFR 63.6(f) by redesignating this section as 40 CFR 63.6(f)(1) and including a ''no'' in column 3. The previous language in 40 CFR 63.6(f)(1) excluded sources from non-opacity standards during periods of SSM, while the previous language in 40 CFR 63.6(h)(1) excluded sources from opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club,* the EPA is finalizing the revised standards in this rule to apply at all times.

4. Performance Testing

We are finalizing revisions to the General Provisions table (Table 4) entry for 40 CFR 63.7(e) by redesignating it as 40 CFR 63.7(e)(1) and including a ''yes'' in column 3. Section 63.7(e)(1) describes performance testing requirements. Section 63.4764(a) of the rule specifies that performance testing must be conducted when the coating operation, emission capture system, and add-on control device are operating at representative conditions. You must document why the conditions represent normal operation. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during periods of startup, shutdown, or malfunction because conditions during malfunctions are often not representative of normal operating conditions. The EPA is finalizing added language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operations. Section 63.7(e) requires that the owner or operator make available to the Administrator such records ''as may be necessary to determine the condition of the performance test'' available to the Administrator upon request, but does not specifically require the information to be recorded. The added regulatory text to this provision that the EPA is finalizing builds on that requirement and makes explicit the requirement to record the information.

5. Monitoring

We are finalizing revisions to the General Provisions table (Table 4) by redesignating 40 CFR 63.8(c) as 40 CFR 63.8(c)(1), adding entries for 40 CFR 63.8(c)(1)(i) through (iii), and including ''no'' in column 3 for paragraphs (i) and (iii). The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary considering other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control (QC) program for monitoring equipment (40 CFR 63.8(d)).

6. Recordkeeping

We are finalizing revisions to the General Provisions table (Table 4) by adding an entry for 40 CFR 63.10(b)(2)(i) and including a ''no'' in column 3. Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is finalizing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. Special provisions applicable to startup and shutdown, such as a startup and shutdown plan, have been removed from the rule (with exceptions discussed below), thereby reducing the need for additional recordkeeping for startup and shutdown periods.

We are finalizing revisions to the General Provisions table (Table 4) by adding an entry for 40 CFR 63.10(b)(2)(iv) and (v) and including a ''no'' in column 3. When applicable, the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are also finalizing revisions to the General Provisions table (Table 4) by adding an entry for 40 CFR 63.10(c)(15) and including a ''no'' in column 3. The EPA is finalizing that 40 CFR 63.10(c)(15) no longer applies. When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is finalizing elimination of this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

7. Reporting

We are finalizing revisions to the General Provisions table (Table 4) entry for 40 CFR 63.10(d)(5) by changing the ''yes'' in column 3 to a ''no.'' Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement for malfunctions, the EPA is finalizing replacing the SSM report under 40 CFR 63.10(d)(5) with the existing reporting requirements under 40 CFR 63.4720(a). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are finalizing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semiannual report to be required under the final rule. We are finalizing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. Examples of such methods would include mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is finalizing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because plans would no longer be required. The final amendments, therefore, eliminate the cross-reference to 40 CFR 63.10(d)(5)(i) that contains the description of the previously required SSM report format and submittal schedule from this section. These specifications are no longer necessary because the events will be reported in

otherwise required reports with similar format and submittal requirements.

The final amendments also eliminate the cross-reference to 40 CFR 63.10(d)(5)(ii). Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdowns, and malfunctions when a source failed to meet an applicable standard, but did not follow the SSM plan. We no longer require owners and operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan because plans would no longer be required.

D. Alternative Compliance Equation

The EPA proposed the option of using a HAP emission factor based on site-specific measurement of HAP emissions to demonstrate compliance with the emission rate without add-on controls compliance option, instead of assuming that all HAP in the coating is emitted to the atmosphere. As discussed below, we are finalizing a new compliance calculation approach in this rulemaking to allow any facility using a similar process to use the approach without requiring the submittal of an alternative monitoring request to the EPA under the provisions of 40 CFR 63.8(f). The final amendment adds compliance flexibility, but does not alter the originally promulgated emission standards in Tables 1 and 2 to Subpart QQQQ of Part 63.

We are finalizing a new equation within the existing compliance demonstration calculations to more adequately represent the HAP amounts emitted by this type of surface coating or any similar coating.

E. Emissions Testing

The EPA is finalizing amendments to the Surface Coating of Wood Building Products NESHAP that provide an additional compliance demonstration equation. Facilities using the alternative compliance demonstration equation (40 CFR 63.4751(i)) of the emission rate without add-on controls option are required to conduct an initial performance test to demonstrate compliance. Those same facilities are also required to conduct repeat performance testing every 5 years to update/verify the process-specific emission factor used to demonstrate continuing compliance for the new alternative equation (see 40 CFR 63.4752(e)).

F. Electronic Reporting

The EPA is requiring owners and operators of wood building product surface coating facilities to submit electronic copies of the required notification of compliance status, performance test results, and semiannual compliance status reports through the EPA's Central Data Exchange (CDX) using CEDRI. The final rule requires that performance test reports be submitted to CEDRI using the Electronic Reporting Tool (ERT). The final rule requires owners and operators to submit any future notification of compliance status (*e.g.,* for a new coating process) in portable document format (PDF) to CEDRI. For semiannual compliance status reports, in conjunction with the final rule, owners and operators are provided a spreadsheet template to submit information to CEDRI. The template is expected to facilitate reporting and improve reporting consistency. Facilities will be required to use the template to file their semiannual reports 1 year after the reporting template becomes available in CEDRI. The EPA expects to post the reporting template in conjunction with the final rule, so facilities can expect the requirement to begin for the semiannual reporting using the template by March 4, 2020.

The electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in these reports; is in keeping with current trends in data availability, accountability, and transparency; will further assist in the protection of public health and the environment; will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with the requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance; and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting eliminates paper-based, manual processes, thereby saving time and resources; simplifying data entry; eliminating redundancies; minimizing data reporting errors; and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. A more streamlined and accurate review of performance test data will become available to the public through the EPA's Web Factor Information Retrieval System (WebFIRE).

In summary, in addition to supporting regulation development, control strategy development, and other air pollution control activities, having an electronic database populated with performance test data will save industry, state, local, tribal agencies, and the EPA significant time, money, and effort while improving the quality of emission inventories and air quality regulations.

For a more thorough discussion of electronic reporting, see the discussion in the preamble of the proposal, at 83 FR 22754, and the memorandum titled *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* available in Docket ID No. EPA–HQ–OAR–2016–0678.

G. EPA Test Method 326

We are finalizing EPA Method 326 to improve test methodology related to volatile organic HAP content measured in certain surface coatings containing isocyanates. Because there was no EPA test method for isocyanate emissions, as part of this action, we are finalizing specific isocyanate compound sample collection and analytical requirements as EPA Method 326 of 40 CFR part 63, appendix A. EPA Method 326 is based on ''A Method for Measuring Isocyanates in Stationary Source Emissions,'' which was proposed on December 8, 1997 (see 62 FR 64532) as EPA Method 207, but was never promulgated. EPA Method 326 does not significantly modify the sampling and analytical techniques of the previously proposed method, but includes additional QC procedures and associated performance criteria to ensure the overall quality of the measurement.

EPA Method 326 is based on the EPA Method 5 sampling train employing a derivatizing reagent (1-(2-pyridyl) piperazine in toluene) in the impingers to immediately stabilize the isocyanate compounds upon collection. Collected samples are analyzed using high performance liquid chromatography and an appropriate detector under laboratory conditions sufficient to separate and quantify the isocyanate compounds.

The sampling and analytical techniques were validated at three sources according to EPA Method 301 (40 CFR part 63, appendix A) and the report of this validation, titled *Laboratory Development and Field Evaluation of a Generic Method for Sampling and Analysis of Isocyanates,* can be found in the docket, Docket ID No. EPA–HQ–OAR–2016–0678. Under the final rule, this validated technique would be used to reliably collect and analyze gaseous isocyanate emissions from surface coatings of wood building products for methylene diphenyl diisocyanate (MDI), methyl isocyanate (MI), hexamethylene-1,6-diisocyanate (HDI), and 2,4 toluene diisocyanate (TDI). This method will also provide a tool for state and local governments,

industry, and the EPA to reliably measure emissions of MDI, MI, HDI, and/or TDI from other types of stationary sources, such as pressed board, flexible foam, and spray booths.

H. IBR Under 1 CFR Part 51

The EPA is finalizing regulatory text that includes IBR. In accordance with requirements of 1 CFR 51.5, the EPA is incorporating by reference National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) Method ISS/FP A105.01 and the following voluntary consensus standards (VCS) described in the amendments to 40 CFR 63.14:

- ANSI A135.4–2012, Basic Hardboard, approved June 8, 2012, IBR approved for 40 CFR 63.4781.
- ASTM D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for 40 CFR 63.4741(b)(3) and (c) and 63.4751(c).
- ASTM D2111–10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for 40 CFR 63.4741(a)(2)(i).
- ASTM D2369–10 (Reapproved 2015)[e], Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for 40 CFR 63.4741(a)(2)(ii).
- ASTM D2697–03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for 40 CFR 63.4741(a)(2)(iii) and (b).
- ASTM D4840–99 (Reapproved 2018)[e], Standard Guide for Sampling Chain-of-Custody Procedures, approved August 15, 2018, IBR approved for EPA Method 326 in appendix A to part 63.
- ASTM D6093–97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, Approved December 1, 2016, IBR approved for 40 CFR 63.4741(a)(2)(iv) and (b)(1).
- ASTM D6348–03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2010, IBR approved for 40 CFR 63.4751(i) introductory paragraph and (i)(4), 63.4752(e), and 63.4766(b) introductory paragraph and (b)(4).

While the American Society for Testing and Materials (ASTM) methods D2697–86 and D6093–97 were incorporated by reference when 40 CFR part 63, subpart QQQQ, was originally promulgated (68 FR 31760), the methods have been updated and reapproved and are also being cited in additional paragraphs in the final rule, requiring a revision to their IBR. NCASI Method ISS/FP A105.01 was incorporated by reference when 40 CFR part 63, subpart DDDD, Table 4 was amended in 2006. The American National Standards Institute (ANSI) method (published by the Composite Panel Association) and the other ASTM methods are being incorporated by reference for 40 CFR part 63, subpart QQQQ, for the first time under this rulemaking.

I. Technical and Editorial Changes

The following are additional final changes that address technical and editorial corrections:

- Revised the monitoring requirements section in 40 CFR 63.4764 to clarify ongoing compliance provisions to address startup and shutdown periods when certain parameters cannot be met;
- Revised the recordkeeping requirements section in 40 CFR 63.4730 to include the requirement to record information on failures to meet the applicable standard;
- Revised the references to several test method appendices;
- Revised the General Provisions applicability table (Table 4 to Subpart QQQQ of Part 63) to align with sections of the General Provisions that have been amended or reserved over time; and
- Revised 40 CFR 63.4681 to update reference to 40 CFR part 63, subpart DDDD.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

There are currently 57 wood building product manufacturing facilities operating in the United States that conduct surface coating operations and are subject to the Surface Coating of Wood Building Products NESHAP. The 40 CFR part 63, subpart QQQQ, affected source is the collection of all the items listed in 40 CFR 63.4682(b)(1) through (4) that are used for surface coating of wood building products. A new affected source is a completely new wood building products surface coating source where previously no wood building products surface coating source had existed.

B. What are the air quality impacts?

At the current level of control, the EPA estimates emissions of total HAP are approximately 270 tpy.[5] Compared to pre-MACT levels, this represents a significant reduction of HAP for the category. Prior to the development of the Surface Coating of Wood Building Products NESHAP, the EPA estimated HAP emissions to be 14,300 tons annually.[6] The final amendments will require all 57 major sources with equipment subject to the Wood Building Products Coating NESHAP to operate without the SSM exemption. We are unable to quantify the specific emissions reductions associated with eliminating the SSM exemption, but eliminating the SSM exemption will reduce emissions by requiring facilities to meet the applicable standard during SSM periods.

Indirect or secondary air emissions impacts are impacts that would result from the increased electricity usage associated with the operation of control devices (*i.e.,* increased secondary emissions of criteria pollutants from power plants). Energy impacts consist of the electricity and steam needed to operate control devices and other equipment that would be required under this rule. The EPA expects no secondary air emissions impacts or energy impacts from this rulemaking because this action does not amend the numeric emission limit.

For further information, see the memoranda titled *Cost Impacts of the Subpart QQQQ Residual Risk and Technology Review* and *Economic Impact and Small Business Screening Assessments for Final Amendments to the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products,* in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

C. What are the cost impacts?

We estimate that, as a result of these final amendments, each facility in the source category will experience reporting and recordkeeping costs. Each facility will experience costs to read and understand the rule amendments. Costs associated with the elimination of the SSM exemption were estimated as part of the reporting and recordkeeping costs and include time for re-evaluating previously developed SSM record systems. Costs associated with the requirement to electronically submit

[5] For more information, see the memorandum in the docket titled, *Addendum to Preparation of the Residual Risk Modeling Input File for Subpart QQQQ;* Docket ID No. EPA–HQ–OAR–2016–0678.

[6] *National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Wood Building Products (Surface Coating) Industry—Background Information for Proposed Standards;* EPA–453/R–00–003; May 2001.

notifications and semiannual compliance reports using CEDRI were estimated as part of the reporting and recordkeeping costs and include time for becoming familiar with CEDRI and the reporting template for semiannual compliance reports. The reporting and recordkeeping costs are presented in this section of the preamble. A thorough discussion of the facility-by-facility costs is contained in the supporting statement for the 40 CFR part 63, subpart QQQQ amendments, *Supporting Statement, NESHAP for the Wood Building Products Surface Coating Industry (40 CFR part 63, subpart QQQQ) (Final Amendments); December 2018,* which can be found in the docket for this rule, Docket ID No. EPA–HQ–OAR–2016–0678.

The EPA estimates that one facility will be impacted by this final regulatory action. This facility will conduct an initial performance test to demonstrate compliance with the alternative compliance equation, as related to their request for an alternative monitoring method. This initial performance test has a cost of $22,000, and the repeat testing will cost $22,000 every 5 years.

The total estimated labor costs for the rule are summarized in the Supporting Statement for the information collection request (ICR) in the docket for this action. The estimated labor cost is $38,000 for all 57 affected facilities to become familiar with the final rule requirements. For further information, see the memorandum titled *Cost Impacts of the Subpart QQQQ Residual Risk and Technology Review,* in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

D. What are the economic impacts?

Economic impact analyses focus on changes in market prices and output levels. If changes in market prices and output levels in the primary markets are significant enough, impacts on other markets may also be examined. Both the magnitude of costs needed to comply with a final rule and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to a final rule.

For the one facility expected to conduct an initial performance test and become familiar with the final rule requirements, the costs associated with 40 CFR part 63, subpart QQQQ's final requirements are approximately 0.002 percent of annual sales revenues. For the remaining 56 facilities, the costs associated with becoming familiar with the final rule requirements are less than 0.001 percent of annual sales revenues. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms. For further information, see the memorandum titled *Economic Impact and Small Business Screening Assessments for Final Amendments to the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products,* in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

E. What are the benefits?

The EPA did not change any of the emission limit requirements and estimates the final changes to SSM, recordkeeping, reporting, and monitoring are not economically significant. Because these final amendments are not considered economically significant, as defined by Executive Order 12866, and because no emission reductions were estimated, we did not estimate any benefits from reducing emissions.

F. What analysis of environmental justice did we conduct?

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on EJ. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make EJ part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

To examine the potential for any EJ issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Surface Coating of Wood Building Products source category across different demographic groups within the populations living near facilities.[7]

The results of the demographic analysis are summarized in Table 3 below. These results for various demographic groups are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 3—SURFACE COATING OF WOOD BUILDING PRODUCTS SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to wood building products surface coating [1]	Population with chronic HI above 1 due to wood building products surface coating
Total Population	317,746,049	0	0
Race by Percent			
White	62	0	0
All Other Races	38	0	0
Race by Percent			
White	62	0	0
African American	12	0	0
Native American	0.8	0	0

[7] Demographic groups included in the analysis are: White, African American, Native American, other races, and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

TABLE 3—SURFACE COATING OF WOOD BUILDING PRODUCTS SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS—Continued

	Nationwide	Population with cancer risk at or above 1-in-1 million due to wood building products surface coating [1]	Population with chronic HI above 1 due to wood building products surface coating
Other and Multiracial	7	0	0
Ethnicity by Percent			
Hispanic	18	0	0
Non-Hispanic	82	0	0
Income by Percent			
Below Poverty Level	14	0	0
Above Poverty Level	86	0	0
Education by Percent			
Over 25 and without High School Diploma	14	0	0
Over 25 and with a High School Diploma	86	0	0
Linguistically Isolated by Percent			
Linguistically Isolated	6%	0%	0%

[1] Based on actual emissions in the category.

The results of the Surface Coating of Wood Building Products source category demographic analysis indicate that emissions from the source category do not expose people to a cancer risk at or above 1-in-1 million based on actual emissions. Also, no people are exposed to a chronic noncancer TOSHI greater than 1. The percentages of the at-risk population are demographically similar to their respective nationwide percentages for all demographic groups.

The EPA received a comment on our proposed rule stating that we ignored unacceptably disproportionate effects on EJ communities. As noted above, we re-evaluated our risk impacts from the category with a revised risk assessment. One aspect of this assessment was that it generated a risk report based on a more refined risk assessment model. Those risk model results did show lower risk in the EJ communities where larger impacts were noted at proposal. The EPA considered this comment and has reaffirmed its determination that this final rule will not have disproportionately high and adverse human health or environmental effects on minority, low income, or indigenous populations because it increases the level of environmental protection for all affected populations.

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Wood Building Products Source Category Operations,* available in the docket for this action, EPA–HQ–OAR–2016–0678.

G. What analysis of children's environmental health did we conduct?

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in *Residual Risk Assessment for the Surface Coating of Wood Building Products Source Category in Support of the 2018 Risk and Technology Review Final Rule,* available in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

The information collection activities in this final rule have been submitted for approval to OMB under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 2034.08. You can find a copy of the ICR in the docket for this rule (Docket ID No. EPA–HQ–OAR–2016–0678), and it is briefly summarized here.

We are finalizing changes to the paperwork requirements for the Surface Coating of Wood Building Products NESHAP in the form of eliminating the SSM reporting and SSM plan requirements, and requiring electronic submittal of semiannual compliance reports and any future notifications of compliance status or performance test reports.

Respondents/affected entities: Respondents include wood building product manufacturing facilities with surface coating operations subject to the Surface Coating of Wood Building Products NESHAP.

Respondent's obligation to respond: Mandatory (authorized by section 114 of the CAA).

Estimated number of respondents: 57.

Frequency of response: The frequency of responses varies depending on the burden item. Responses include notifications, reports of performance tests, and semiannual compliance reports.

Total estimated burden: The annual recordkeeping and reporting burden for this information collection, averaged over the first 3 years of this ICR, is estimated to total 20,208 labor hours per year. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $1,465,000 per year in labor costs, including $38,000 in labor cost for all 57 facilities to become familiar with the final rule requirements. An additional cost of $22,000 is estimated for an initial performance test at one facility during the 3-year ICR period. These estimated costs represent the full ongoing information collection burden for 40 CFR part 63, subpart QQQQ, as revised by the final amendments being promulgated.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. In addition, the EPA is amending the table in 40 CFR part 9 to list the regulatory citations for the information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. We conducted an economic impact analysis which is available in the docket for this final rule, Docket ID No. EPA–HQ–OAR–2016–0678. For all but one of the facilities affected by the final rule, including the small businesses, the costs associated with the final rule requirements are less than 0.001 percent of annual sales revenues; for the remaining facility, the costs are less than 0.002 percent of annual sales revenues. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian Tribes, or on the distribution of power and responsibilities between the federal government and Indian Tribes, as specified in Executive Order 13175. This final rule imposes requirements on owners and operators of wood building product surface coating facilities and not tribal governments. The EPA discussed the proposed action at a meeting of the National Tribal Air Association,[8] and has not been informed and does not know of any wood building product surface coating facilities owned or operated by Indian tribal governments. However, if there are any, the effect of this rule on communities of tribal governments would not be unique or disproportionate to the effect on other communities. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. A description of the health risk assessment conducted as part of this action is provided in sections III and IV of this preamble and further documented in the risk report titled *Residual Risk Assessment for the Surface Coating of Wood Building Products Source Category in Support of the 2018 Risk and Technology Review Final Rule,* in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA is finalizing the use of NCASI Method ISS/FP A105.01, ''Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds,'' December 2005, Methods Manual, and ASTM D6348–03 (Reapproved 2010), ''Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy'' as alternatives to using EPA Method 320 under certain conditions, and is incorporating these alternative methods by reference. EPA Method 320 is added for the measurement of organic HAP emissions if formaldehyde is a major organic HAP component of the surface coating exhaust stream. EPA Method 320 can also be used for other HAP that may be found in wood building products coatings. NCASI Method ISS/FP A105.01 is an impinger source sampling method for the collection and analysis of a wider range of aldehydes, ketones, and polar organics, has previously been incorporated by reference at 40 CFR 63.14, and is reasonably available from National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P.O. Box 133318, Research Triangle Park, NC 27709–3318 or at *http://www.ncasi.org.*

Instead of the current ASTM D6348–12 standard, the ASTM D6348–03 (Reapproved 2010) standard is referenced in the Surface Coating of Wood Building Products NESHAP. The QC criteria in ASTM D6348–03 (Reapproved 2010) are more closely matched to the testing requirements in this NESHAP. Use of ASTM D6348–03 (Reapproved 2010) is defined in 40 CFR 63.4751(i)(4). ASTM D6348–03 (Reapproved 2010) is an extractive FTIR

[8] See *National Tribal Air Association—EPA Air Policy Update Call;* Thursday May 31, 2018, in the docket for this rule; Docket ID No. EPA–HQ–OAR–2016–0678.

spectroscopy-based field test method and is used to quantify gas phase concentrations of multiple target compounds in emission streams from stationary sources.

ANSI A135.4–2012, ''Basic Hardboard,'' is reasonably available from the Composite Panel Association, 19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176. The standard specifies requirements and test methods for water absorption, thickness swelling, modulus of rupture, tensile strength, surface finish, dimensions, squareness, edge straightness, and moisture content for five classes of hardboard, including tileboard, part of a subcategory in the standard.

The EPA is also using ASTM D4840–99 (Reapproved 2018)^{e}, ''Standard Guide for Sampling Chain-of-Custody Procedures,'' in EPA Method 326 for its chain of custody procedures and is incorporating this alternative method by reference. The ASTM D4840–99 (Reapproved 2018)^{e} guide contains a comprehensive discussion of potential requirements for a sample chain-of-custody program and describes the procedures involved in sample chain-of-custody. The purpose of ASTM D4840–99 (Reapproved 2018)^{e} procedures is to provide accountability for and documentation of sample integrity from the time samples are collected until the time samples are disposed. EPA Method 326 is added for the measurement of organic HAP emissions if isocyanate is a major organic HAP component of the surface coating exhaust stream.

The EPA is finalizing the use of the following four VCS as alternatives to EPA Method 24 for the determination of volatile matter content, water content, density, volume solids, and weight solids of surface coatings and incorporate these VCS by reference:

- ASTM D2111–10 (Reapproved 2015), ''Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures.'' These test methods are used for the determination of the specific gravity of halogenated organic solvents and solvent admixtures.
- ASTM D2369–10 (Reapproved 2015)^{e}, ''Standard Test Method for Volatile Content of Coatings.'' This test method describes a procedure used for the determination of the weight percent volatile content of solvent-borne and waterborne coatings.
- ASTM D2697–03 (Reapproved 2014), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings.'' This test method is applicable to the determination of the volume of nonvolatile matter in coatings.
- ASTM D6093–97 (Reapproved 2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer.'' This test method is used for the determination of the percent volume nonvolatile matter in clear and pigmented coatings.

The ASTM standards are reasonably available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959. See *http://www.astm.org/.*

While the EPA has identified another 18 VCS as being potentially applicable to this final rule, we have decided not to use these VCS in this rulemaking. The use of these VCS would not be practical due to lack of equivalency, documentation, validation date, and other important technical and policy considerations. See the memorandum titled *Voluntary Consensus Standard Results for National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products,* in the docket for this final rule for the reasons for these determinations.

Under 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the General Provisions, a source may apply to the EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures in the final rule or any amendments.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in section IV.A of this preamble and the technical report titled *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Wood Building Products Surface Coating Sources,* which is located in the public docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

We examined the potential for any EJ issues that might be associated with the source category by performing a demographic analysis of the population close to the facilities. See section V.F, above. In this analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Surface Coating of Wood Building Products NESHAP source category across different social, demographic, and economic groups within the populations living near facilities identified as having the highest risks. The methodology and the results of the demographic analyses are included in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Wood Building Products Source Category Operations,* available in the docket for this action, Docket ID No. EPA–HQ–OAR–2016–0678.

The results of the Surface Coating of Wood Building Products NESHAP source category demographic analysis indicate that approximately 700 people may be exposed to a cancer risk of 1-in-1 million based on allowable emissions from the source category and no one is exposed to a chronic noncancer TOSHI greater than 1. The specific demographic results indicate that the percentage of the population potentially impacted by wood building products emissions is similar among all demographic groups (see Table 3 of this preamble). The proximity results (irrespective of risk) indicate that the population percentages for certain demographic categories within 5 km of source category emissions are greater than the corresponding national percentage for those same demographics. The following demographic percentages for populations residing within close proximity to facilities with Surface Coating of Wood Building Products source category facilities are higher than the corresponding nationwide percentage: African American, ages 65 and up, over age 25 without a high school diploma, and below the poverty level.

The risks due to actual HAP emissions from this source category are low for all populations (*e.g.,* inhalation cancer risks are less than 1-in-1 million for all populations and noncancer HIs are less than 1). We do not expect this final rule to achieve significant reductions in HAP emissions. We have concluded that this final rule will not have unacceptable adverse human health or environmental effects on minority or low-income populations. The final rule does not affect the level of protection provided to human health or the environment. However, this final rule will provide additional benefits to these demographic groups by improving the compliance, monitoring, and implementation of the NESHAP.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to

each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products Residual Risk and Technology Review, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 20, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—[Amended]

■ 2. Section 63.14 is amended:

■ a. In paragraph (a), by removing—''*http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*'' and adding ''*www.archives.gov/federal-register/cfr/ibr-locations.html*'' in its place;

■ b. By redesignating the paragraphs in the Old Paragraph column as the paragraphs in the New Paragraph column as follows:

Old paragraph	New paragraph
(c)	(f)
(d)	(g)
(e) through (g)	(c) through (e)
(l) through (s)	(m) through (t);

■ c. In paragraph (h)—

■ i. In the introductory text, by removing ''American Society for Testing and Materials (ASTM)'' and adding ''ASTM International'' in its place;

■ ii. By redesignating the paragraphs in the Old Paragraph column as the paragraphs in the New Paragraph column as follows:

Old paragraph	New paragraph
(h)(13) through (h)(19)	(h)(14) through (h)(20)
(h)(20) through (h)(23)	(h)(22) through (h)(25)
(h)(24) through (h)(26)	(h)(27) through (h)(29)
(h)(27) through (h)(59)	(h)(31) through (h)(63)
(h)(60) through (h)(73)	(h)(65) through (h)(78)
(h)(74) through (h)(105)	(h)(80) through (h)(111);

■ iii. By adding new paragraphs (h)(13), (21), (26), (30), (64), and (79); and

■ iv. By revising newly redesignated paragraph (h)(84).

■ d. By adding new paragraph (l); and

■ e. By revising newly designated paragraph (p)(5).

The revisions and additions read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(h) * * *

(13) ASTM D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.4741(b) and (c) and 63.4751(c).

* * * * *

(21) ASTM D2111–10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for § 63.4741(a).

* * * * *

(26) ASTM D2369–10 (Reapproved 2015)[e], Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for § 63.4741(a).

* * * * *

(30) ASTM D2697–03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for § 63.4741(a) and (b).

* * * * *

(64) ASTM D4840–99 (Reapproved 2018)[e], Standard Guide for Sampling Chain-of-Custody Procedures, approved August 15, 2018, IBR approved for appendix A to part 63.

* * * * *

(79) ASTM D6093–97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, Approved December 1, 2016, IBR approved for § 63.4741(a) and (b).

* * * * *

(84) ASTM D6348–03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2010, IBR approved for §§ 63.1571(a), 63.4751(i), 63.4752(e), 63.4766(b), tables 4 and 5 to subpart JJJJJ, tables 4 and 6 to subpart KKKKK, tables 1, 2, and 5 to subpart UUUUU and appendix B to subpart UUUUU.

* * * * *

(l) Composite Panel Association, 19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176, Telephone (703)724–1128, and *www.compositepanel.org.*

(1) ANSI A135.4–2012, Basic Hardboard, approved June 8, 2012, IBR approved for § 63.4781.

(2) [Reserved]

* * * * *

(p) * * *

(5) NCASI Method ISS/FP A105.01, Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds, December 2005, Methods Manual, IBR approved for table 4 to subpart DDDD and §§ 63.4751(i) and 63.4752(e).

* * * * *

Subpart QQQQ—[Amended]

■ 4. Section 63.4681 is amended by revising paragraph (c)(1) introductory text to read as follows:

§ 63.4681 Am I subject to this subpart?

* * * * *

(c) * * *

(1) Surface coating in the processes identified in paragraphs (c)(1)(i) through (xi) of this section that are part of plywood and composite wood product manufacturing and subject to subpart DDDD of this part including:

* * * * *

■ 5. Section 63.4683 is amended by revising paragraphs (a) and (b) to read as follows:

§ 63.4683 When do I have to comply with this subpart?

* * * * *

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is before May 28, 2003, the compliance date is May 28, 2003; except that the compliance date for the revised requirements promulgated at §§ 63.4700, 63.4710, 63.4720, 63.4730, 63.4741, 63.4751, 63.4752, 63.4761, 63.4763, 63.4764, 63.4766, 63.4781, table 4 of this subpart QQQQ, and appendix A to 40 CFR part 63 is September 3, 2019.

(2) If the initial startup of your new or reconstructed affected source occurs after May 28, 2003, the compliance date is March 4, 2019 or the date of initial startup of your affected source, whichever is later; except that if you commenced construction or reconstruction of your new or reconstructed affected source after May 28, 2003, but on or before May 16, 2018, the compliance date for the revised requirements promulgated at

§§ 63.4700, 63.4710, 63.4720, 63.4730, 63.4741, 63.4751, 63.4752, 63.4761, 63.4763, 63.4764, 63.4766, 63.4781, table 4 of this subpart QQQQ, and appendix A to 40 CFR part 63 is September 3, 2019.

(b) For an existing affected source, the compliance date is the date 3 years after May 28, 2003, except that the compliance date for the revised requirements promulgated at §§ 63.4700, 63.4710, 63.4720, 63.4730, 63.4741, 63.4751, 63.4752, 63.4761, 63.4763, 63.4764, 63.4766, 63.4781, table 4 of this subpart QQQQ of part 63, and appendix A to 40 CFR part 63 is September 3, 2019.

* * * * *

■ 6. Section 63.4700 is amended by:
■ a. Revising paragraph (a)(2) introductory text and paragraphs (a)(2)(i) and (ii);
■ b. Adding paragraph (a)(3); and
■ c. Revising paragraphs (b) and (d).

The revisions and addition read as follows:

§ 63.4700 What are my general requirements for complying with this subpart?

(a) * * *

(2) Any coating operation(s) at existing sources for which you use the emission rate with add-on controls option, as specified in § 63.4691(c), must be in compliance with the applicable emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) Before September 3, 2019, the coating operation(s) must be in compliance with the applicable emission limit in § 63.4690 at all times, except during periods of startup, shutdown, and malfunction (SSM). On and after September 3, 2019, the coating operation(s) must be in compliance with the applicable emission limit in § 63.4690 at all times.

(ii) Before September 3, 2019, the coating operation(s) must be in compliance with the applicable operating limits for emission capture systems and add-on control devices required by § 63.4692 at all times, except during periods of SSM, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4761(j). On and after September 3, 2019, the coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.4692 at all times, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4761(j).

* * * * *

(3) For new or reconstructed sources with initial startup after May 16, 2018, any coating operation(s) for which you use the emission rate with add-on controls option, as specified in § 63.4691(c), must be in compliance with the applicable emission limitations and work practice standards as specified in paragraphs (a)(3)(i) through (iii) of this section.

(i) The coating operation(s) must be in compliance with the applicable emission limit in § 63.4690 at all times.

(ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.4692 at all times, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4761(j).

(iii) The coating operation(s) must be in compliance with the work practice standards in § 63.4693 at all times.

(b) For existing sources as of March 4, 2019, before September 3, 2019, you must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i). On and after September 3, 2019 for such existing sources and after March 4, 2019 for new or reconstructed sources, you must always operate and maintain your affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

* * * * *

(d) For existing sources, before September 3, 2019, if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The SSMP must address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

■ 7. Section 63.4710 is amended by revising paragraph (c)(8)(ii) to read as follows:

§ 63.4710 What notifications must I submit?

* * * * *

(c) * * *

(8) * * *

(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate, using Equations 1 and 1A (or 1A-alt) through 1C, 2, and 3, respectively, of § 63.4751.

* * * * *

■ 8. Section 63.4720 is amended by:
■ a. Revising paragraph (a)(6)(ii) and paragraph (a)(7) introductory text;
■ b. Redesignating paragraphs (a)(7)(i) through (xiv) as paragraphs (a)(7)(i)(A) through (N);
■ c. Adding paragraph (a)(7)(i) introductory text and paragraph (a)(7)(ii);
■ d. Revising paragraph (c) introductory text; and
■ e. Adding paragraph (d).

The revisions and additions read as follows:

§ 63.4720 What reports must I submit?

(a) * * *

(6) * * *

(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must provide the calculations for Equations 1, 1A (or 1A-alt) through 1C, 2, and 3 in § 63.4751; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4751(e)(4). You do not need to submit background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

* * * * *

(7) *Deviations: Emission rate with add-on controls option.* You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(7)(i) and (ii) of this section.

(i) For existing sources, before September 3, 2019, if you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i)(A) through (N) of this section. This includes periods of SSM during which deviations occurred.

* * * * *

(ii) After March 4, 2019 for new and reconstructed sources, and on and after September 3, 2019 for existing sources, if you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(ii)(A) through (M) of this section.

(A) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.4690.

(B) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used each month, using Equations 1 and 1A through 1C of § 63.4751; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4751(e)(4); the calculation of the total volume of coating solids used each month, using Equation 2 of § 63.4751; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equations 1 and 1A through 1D of § 63.4761, and Equations 2, 3, and 3A through 3C of § 63.4761, as applicable; the calculation of the total mass of organic HAP emissions each month, using Equation 4 of § 63.4761; and the calculation of the 12-month organic HAP emission rate, using Equation 5 of § 63.4761. You do not need to submit the background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(C) A brief description of the CPMS.

(D) The date of the latest CPMS certification or audit.

(E) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(F) The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8).

(G) The date and time period of each deviation from an operating limit in Table 3 to this subpart, date and time period of any bypass of the add-on control device.

(H) A summary of the total duration of each deviation from an operating limit in Table 3 to this subpart, each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(I) A breakdown of the total duration of the deviations from the operating limits in Table 3 to this subpart and bypasses of the add-on control device during the semiannual reporting period by identifying deviations due to control equipment problems, process problems, other known causes, and other unknown causes; a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(J) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(K) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(L) For each deviation from the standard, including work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(M) A statement of the cause of each deviation.

* * * * *

(c) *SSM reports.* For existing sources, before September 3, 2019, if you used the emission rate with add-on controls option and you had an SSM during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.

* * * * *

(d) *Electronic reporting.* (1) Within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (d)(1)(i) through (iii) of this section.

(i) *Data collected using test methods supported by EPA's Electronic Reporting Tool (ERT) as listed on EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on EPA's ERT website.

(ii) *Data collected using test methods that are not supported by EPA's ERT as listed on EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(iii) *Confidential business information (CBI).* If you claim some of the information submitted under paragraph (a)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of EPA's ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described in paragraph (d)(1)(i) of this section.

(2) You must submit the Notification of Compliance Status required in § 63.4710(c) and the semiannual compliance reports required in paragraph (a) of this section to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (*https://cdx.epa.gov/*)). For semiannual compliance reports, you must use the appropriate electronic report in CEDRI for this subpart or an alternative electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). If the reporting form specific to this subpart is not available in CEDRI at the time that

the report is due, you must submit the report to the Administrator at all the appropriate addresses listed in § 63.13. Once the reporting template has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. For the Notification of Compliance Status, you must submit a file in portable document format (PDF) to CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

(3) If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (d)(3)(i) through (vii) of this section.

(i) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either EPA's CEDRI or CDX systems.

(ii) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(iii) The outage may be planned or unplanned.

(iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(v) You must provide to the Administrator a written description identifying:

(A) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(C) Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(vii) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(4) If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (d)(4)(i) through (v) of this section.

(i) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(ii) You must submit the notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(iii) You must provide to the Administrator:

(A) A written description of the force majeure event;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(C) Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(iv) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(v) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

■ 9. Section 63.4730 is amended by:

■ a. Revising paragraph (c)(3) and paragraph (k) introductory text;

■ b. Redesignating paragraphs (k)(1) through (4) as paragraphs (k)(1)(i) through (iv);

■ c. Adding paragraph (k)(1) introductory text and paragraph (k)(2);

■ d. Redesignating paragraphs (k)(5)(i) through (iii) as paragraphs (k)(1)(v)(A) through (C);

■ e. Redesignating paragraph (k)(5) introductory text as paragraph (k)(1)(v) introductory text and revising it;

■ f. Redesignating paragraphs (k)(6)(i) and (ii) as paragraphs (k)(1)(vi)(A) and (B);

■ g. Redesignating paragraph (k)(6) introductory text as paragraph (k)(1)(vi) introductory text and revising it; and

■ h. Redesignating paragraphs (k)(7) and (8) as paragraphs (k)(1)(vii) and (viii).

The revisions and additions read as follows:

§ 63.4730 What records must I keep?

* * * * *

(c) * * *

(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used each month, using Equations 1, 1A (or 1A-alt) through 1C, and 2 of § 63.4751; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4751(e)(4); the calculation of the total volume of coating solids used each month, using Equation 2 of § 63.4751; and the calculation of each 12-month organic HAP emission rate, using Equation 3 of § 63.4751.

* * * * *

(k) If you use the emission rate with add-on controls option, you must keep the records specified in paragraphs (k)(1) through (2) of this section.

(1) For existing sources, before September 3, 2019:

* * * * *

(v) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§ 63.4764 and 63.4765(b) through (e), including the records specified in paragraphs (k)(1)(v)(A) through (C) of this section that apply to you.

* * * * *

(vi) The records specified in paragraphs (k)(1)(vi)(A) and (B) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.4766.

* * * * *

(2) After March 4, 2019 for new and reconstructed sources, and on and after September 3, 2019 for existing sources:

(i) The records required to show continuous compliance with each operating limit specified in Table 3 to this subpart that applies to you.

(ii) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in § 63.4765(a).

(iii) For each capture system that is not a PTE, the data and documentation

you used to determine capture efficiency according to the requirements specified in §§ 63.4764 and 63.4765(b) through (e), including the records specified in paragraphs (k)(2)(iii)(A) through (C) of this section that apply to you.

(A) *Records for a liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(B) *Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.* Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(C) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol as specified in § 63.4765(e), if applicable.

(iv) The records specified in paragraphs (k)(2)(iv)(A) and (B) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.4766.

(A) Records of each add-on control device performance test conducted according to §§ 63.4764 and 63.4766.

(B) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(v) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in § 63.4767 and to document compliance with the operating limits as specified in Table 3 to this subpart.

(vi) A record of the work practice plan required by § 63.4693, and documentation that you are implementing the plan on a continuous basis.

■ 10. Section 63.4741 is amended by revising:

■ a. Paragraph (a)(2);

■ b. The subject heading and first sentence of paragraph (b)(1);

■ c. The defined terms ''$m_{volatiles}$'' and ''D_{avg}'' in Equation 1 in paragraph (b)(3) introductory text; and

■ d. Paragraph (c).

The revisions read as follows:

§ 63.4741 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(a) * * *

(2) *Method 24 (appendix A–7 to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. (**Note:** Method 24 is not appropriate for those coatings with a water content that would result in an effective detection limit greater than the applicable emission limit.) One of the voluntary consensus standards in paragraphs (a)(2)(i) through (iv) may be used as an alternative to using Method 24.

(i) ASTM Method D2111–10 (Reapproved 2015), ''Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures,'' (incorporated by reference, see § 63.14);

(ii) ASTM Method D2369–10 (Reapproved 2015)[e], ''Standard Test Method for Volatile Content of Coatings,'' (incorporated by reference, see § 63.14);

(iii) ASTM Method D2697–03 (Reapproved 2014), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,'' (incorporated by reference, see § 63.14); and

(iv) ASTM Method D6093–97 (Reapproved 2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer,'' (incorporated by reference, see § 63.14).

* * * * *

(b) * * *

(1) *ASTM Method D2697–03 (Reapproved 2014) or D6093–97 (Reapproved 2016).* You may use ASTM Method D2697–03 (Reapproved 2014), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings'' (incorporated by reference, see § 63.14), or D6093–97 (Reapproved 2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer'' (incorporated by reference, see § 63.14), to determine the volume fraction of coating solids for each coating. * * *

* * * * *

(3) * * *

$m_{volatiles}$ = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A–7 of 40 CFR part 60, grams volatile matter per liter coating.

D_{avg} = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–13 test results and other information sources, the test results will take precedence.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM Method D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' (incorporated by reference, see § 63.14), or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475–13 test results and the supplier's or manufacturer's information, the test results will take precedence.

* * * * *

■ 11. Section 63.4751 is amended by:

■ a. Revising paragraph (c);

■ b. Revising the defined term ''A'' in Equation 1 in of paragraph (e) introductory text; and

■ c. Adding paragraph (i).

The revisions and addition read as follows:

§ 63.4751 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(c) *Determine the density of each material.* Determine the density of each coating, thinner, and cleaning material

used during each month from test results using ASTM Method D1475–13 (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–13 test results and such other information sources, the test results will take precedence.

* * * * *

(e) * * *

$$A = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i})(EF_{c,i}) \qquad (Eq. 1A - alt)$$

Where:

A = Total mass of organic HAP in the coatings used during the month, grams.

$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

$D_{c,j}$ = Density of coating, i, grams coating per liter of coatings.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i, grams organic HAP per gram coating.

$EF_{c,i}$ = Organic HAP emission factor (three-run average from performance testing, evaluated as proportion of mass organic HAP emitted to mass of organic HAP in the coatings used during the performance test).

m = Number of different coatings used during the month.

(2) Calculate the organic HAP emission rate for the 12-month compliance period, grams organic HAP per liter coating solids used, using Equation 3 of this section.

(3) The organic HAP emission rate for the initial 12-month compliance period, calculated using Equation 3 of this section, must be less than or equal to the applicable emission limit in § 63.4690. You must keep all records as required by §§ 63.4730 and 63.4731. As part of the Notification of Compliance Status required by § 63.4710, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4690, determined according to this section.

(4) If ASTM D6348–03 (Reapproved 2010) is used, the conditions specified in paragraphs (i)(4)(i) and (ii) must be met.

(i) Test plan preparation and implementation in the Annexes to ASTM D6348–03 (Reapproved 2010), sections A1 through A8 are mandatory.

(ii) In ASTM D6348–03 (Reapproved 2010) Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5 of ASTM D6348–03). In order for the test data to be acceptable for a compound, %R must be between 70 and 130 percent. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound, and the test must be repeated for that analyte following adjustment of the sampling and/or analytical procedure before the retest. The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound using the following equation: Reported Result = (Measured Concentration in the Stack × 100)/%R.

■ 12. Section 63.4752 is amended by adding paragraph (e) to read as follows:

§ 63.4752 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(e) If you use the alternative compliance demonstration described in § 63.4751(i), you must identify each organic HAP component in the coating(s) and conduct a performance test every 5 years to obtain an organic HAP emission factor (EF). You must use the following methods, as appropriate: Method 320 of appendix A to 40 CFR part 63 or NCASI Method ISS/FP A105.01 (incorporated by reference, see § 63.14) (for formaldehyde) or Method 326 of appendix A to 40 CFR part 63 (for isocyanates). The voluntary consensus standard ASTM D6348–03 (Reapproved 2010) (incorporated by reference, see § 63.14) may be used as an alternative to using Method 320 under the conditions specified in § 63.4751(i)(4)(i) and (ii).

■ 13. Section 63.4761 is amended by revising paragraph (j)(3) to read as follows:

§ 63.4761 How do I demonstrate initial compliance?

* * * * *

(j) * * *

(3) Determine the mass fraction of volatile organic matter for each coating, thinner, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, grams volatile organic matter per gram coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A–7, one of the voluntary consensus standards specified in § 63.4741(a)(2)(i) through (iv), or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A–7, or an approved alternative method, the test method results will take precedence unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct.

* * * * *

■ 14. Section 63.4763 is amended by revising paragraph (h) to read as follows:

§ 63.4763 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(h) For existing sources, before September 3, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of SSM of the

emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period you identify as an SSM are violations, according to the provisions in § 63.6(e).

* * * * *

■ 15. Section 63.4764 is amended by revising paragraphs (a)(1) and (2) to read as follows:

§ 63.4764 What are the general requirements for performance tests?

(a) * * *

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, and nonoperation do not constitute representative conditions. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

* * * * *

■ 16. Section 63.4766 is amended by revising paragraphs (a)(1) through (4), (b), (d), and (f) to read as follows:

§ 63.4766 How do I determine the add-on control device emission destruction or removal efficiency?

* * * * *

(a) * * *

(1) Use Method 1 or 1A of appendix A–1 to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, or 2F of appendix A–1 to 40 CFR part 60, or Method 2G of appendix A–2 to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A–2 to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]'' (incorporated by reference, see § 63.14).

(4) Use Method 4 of appendix A–3 to 40 CFR part 60 to determine stack gas moisture.

* * * * *

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using Method 25 or 25A of appendix A–7 to 40 CFR part 60, and Method 320 or 326 of appendix A to 40 CFR part 63, as specified in paragraphs (b)(1) through (5) of this section. The voluntary consensus standard ASTM D6348–03 (Reapproved 2010) (incorporated by reference in § 63.14) may be used as an alternative to using Method 320 if the conditions specified in § 63.4751(i)(4)(i) and (ii) are met. You must use the same method for both the inlet and outlet measurements.

(1) Use Method 25 of appendix A–7 to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use Method 25A of appendix A–7 to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use Method 25A of appendix A–7 to 40 CFR part 60 if the add-on control device is not an oxidizer.

(4) If Method 25A is used, and if formaldehyde is a major organic HAP component of the surface coating exhaust stream, use Method 320 of appendix A to 40 CFR part 63 or NCASI Method ISS/FP A105.01 (incorporated by reference in § 63.14) or ASTM D6348–03 (Reapproved 2010) (incorporated by reference in § 63.14) to determine formaldehyde concentration.

(5) In addition to Method 25 or 25A, use Method 326 of appendix A to 40 CFR part 63 if isocyanate is a major organic HAP component of the surface coating exhaust stream.

* * * * *

(d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions. The mass emission rates for formaldehyde and individual isocyanate must be determined separately.

$$M_f = Q_{sd} C_c MW (41.6)(10^{-6}) \qquad (Eq. 1)$$

Where:

M_f = Total gaseous organic emissions mass flow rate, grams per hour (h).

MW = Molecular weight of analyte of interest (12 for Method 25 and 25A results).

C_c = Concentration of organic compounds in the vent gas (as carbon if determined by Method 25 or Method 25A), parts per million by volume (ppmv), dry basis.

Q_{sd} = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

41.6 = Conversion factor for molar volume, gram-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

* * * * *

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section. Destruction and removal efficiency must be determined independently for formaldehyde and isocyanates.

■ 17. Section 63.4781 is amended by revising paragraph (3) under the definition of ''deviation'' and revising the definition of ''tileboard'' to read as follows:

§ 63.4781 What definitions apply to this subpart?

* * * * *

Deviation * * *

(3) On and after September 3, 2019, fails to meet any emission limit, or operating limit, or work practice standard in this subpart during SSM.

* * * * *

Tileboard means hardboard that meets the specifications for Class I given by the standard ANSI A135.4–2012 (incorporated by reference, see § 63.14) as approved by the American National Standards Institute. The standard specifies requirements and test methods for water absorption, thickness swelling, modulus of rupture, tensile strength, surface finish, dimensions, squareness, edge straightness, and moisture content for five classes of hardboard. Tileboard is also known as Class I hardboard or tempered hardboard.

* * * * *

■ 18. Table 4 to Subpart QQQQ is revised to read as follows:

Table 4 to Subpart QQQQ of Part 63—Applicability of General Provisions to Subpart QQQQ of Part 63

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart QQQQ	Explanation
§ 63.1(a)(1)–(14)	General Applicability	Yes.	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart QQQQ is also specified in § 63.4681.
§ 63.1(c)(1)	Applicability After Standard Established	Yes.	
§ 63.1(c)(2)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart QQQQ.
§ 63.1(c)(3)	[Reserved]	No.	
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes.	
§ 63.1(d)	[Reserved]	No.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4781.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(c)	[Reserved]	No.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	§ 63.4683 specifies compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	§ 63.4683 specifies compliance dates.
§ 63.6(d)	[Reserved]	No.	
§ 63.6(e)(1)(i)	General Duty to Minimize Emissions	No	See § 63.4700(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Requirement to Correct Malfunctions ASAP	No.	
§ 63.6(e)(1)(iii)	Operation and Maintenance Requirements Enforceable Independent of Emissions Limitations.	Yes.	
§ 63.6(e)(2)	[Reserved]	No.	
§ 63.6(e)(3)	SSMP	No.	
§ 63.6(f)(1)	Compliance Except During SSM	No.	
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes.	
§ 63.6(h)	Compliance with Opacity/Visible Emissions Standards.	No	Subpart QQQQ does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes.	
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4751, 63.4752, 63.4764, 63.4765, and 63.4766.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. § 63.4760 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(a)(4)	Notification of Delay in Performance Testing Due to Force Majeure.	Yes.	

Citation	Subject	Applicable to subpart QQQQ	Explanation
§ 63.7(b)–(d)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Performance Testing	Yes.	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)–(2)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.4768.
§ 63.8(a)(3)	[Reserved]	No.	
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart QQQQ does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)	Continuous Monitoring System (CMS) Operation and Maintenance.	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4768.
§ 63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation.	No.	
§ 63.8(c)(1)(ii)	Operation and Maintenance of CMS	Yes.	
§ 63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS	No.	
§ 63.8(c)(2)–(3)	Monitoring System Installation	Yes.	
§ 63.8(c)(4)	CMSs	No	§ 63.4768 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart QQQQ does not have opacity for visible emission standards.
§ 63.8(c)(6)	CMS Requirements	Yes	§ 63.4768 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes.	
§ 63.8(c)(8)	CMS Out-of-Control Periods Reporting	No	§ 63.4720 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes.	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)–(5)	Data Reduction	No	§§ 63.4767 and 63.4768 specify monitoring data reduction.
§ 63.9(a)–(d)	Notification Requirements	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart QQQQ does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS	No	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	§ 63.4710 specifies the dates for submitting the Notification of Compliance Status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4730 and 63.4731.
§ 63.10(b)(2)(i)–(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	No.	
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to CMS	Yes.	
§ 63.10(b)(2)(iv)–(v)	Recordkeeping Relevant to SSM	No.	
§ 63.10(b)(2)(vi)–(xi)	Recordkeeping for CMS Malfunctions	Yes.	
§ 63.10(b)(2)(xii)	Records	Yes.	

Citation	Subject	Applicable to subpart QQQQ	Explanation
§ 63.10(b)(2)(xiii)		No	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiv)		Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(7)–(8)		No	The same records are required in § 63.4720(a)(7).
§ 63.10(c)(9)–(14)		Yes.	
§ 63.10(c)(15)	Use of SSM Plan	No.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4720.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4720(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart QQQQ does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	
§ 63.10(d)(5)	SSM Reports	No	Malfunctions shall be reported based on compliance option under § 63.4720(a)(5–7).
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	§ 63.4720(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart QQQQ does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares	No	Subpart QQQQ does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes	Test Methods ANSI A135.4–2012, ANSI/ASME PTC 19.10–1981, Part 10, ASTM D1475–13, ASTM D2111–10 (Reapproved 2015), ASTM D2369–10 (Reapproved 2015)[e], ASTM D2697–03 (Reapproved 2014), ASTM D4840–99 (2018)[e], ASTM D6093–97 (Reapproved 2016), ASTM D6348–03 (Reapproved 2010) and NCASI Method ISS/FP A105.01 (incorporated by reference, see § 63.14).
§ 63.15	Availability of Information/Confidentiality	Yes.	
§ 63.16	Requirements for Performance Track Member Facilities.	Yes.	

■ 19. Appendix A to part 63 is amended by adding Method 326 in numerical order to read as follows:

Appendix A to Part 63—Test Methods

* * * * *

Method 326—Method for Determination of Isocyanates in Stationary Source Emissions

1.0 Scope and Application

This method is applicable to the collection and analysis of isocyanate compounds from the emissions associated with manufacturing processes. This method is not inclusive with respect to specifications (*e.g.,* equipment and supplies) and sampling procedures essential to its performance. Some material is incorporated by reference from other EPA methods. Therefore, to obtain reliable results, persons using this method should have a thorough knowledge of at least Method 1, Method 2, Method 3, and Method 5 found in Appendices A–1, A–2, and A–3 in Part 60 of this title.

1.1 Analytes. This method is designed to determine the mass emission of isocyanates being emitted from manufacturing processes. The following is a table (Table 1–1) of the isocyanates and the manufacturing process at which the method has been evaluated:

TABLE 326–1—ANALYTES

Compound's name	CAS No.	Detection limit (ng/m^3)[a]	Manufacturing process
2,4-Toluene Diisocyanate (TDI)	584–84–9	106	Flexible Foam Production.
1,6-Hexamethylene Diisocyanate (HDI)	822–06–0	396	Paint Spray Booth.
Methylene Diphenyl Diisocyanate (MDI)	101–68–8	112	Pressed Board Production.
Methyl Isocyanate (MI)	624–83–0	228	Not used in production.

[a] Estimated detection limits are based on a sample volume of 1 m^3 and a 10-ml sample extraction volume.

1.2 Applicability. Method 326 is a method designed for determining compliance with National Emission Standards for Hazardous Air Pollutants (NESHAP). Method 326 may also be specified by New Source Performance Standards (NSPS), State Implementation Plans (SIPs), and operating permits that require measurement of isocyanates in stationary source emissions, to determine compliance with an applicable emission standard or limit.

1.3 Data Quality Objectives (DQO). The principal objective is to ensure the accuracy of the data at the actual emissions levels and in the actual emissions matrix encountered. To meet this objective, method performance tests are required and NIST-traceable calibration standards must be used.

2.0 Summary of Method

2.1 Gaseous and/or aerosol isocyanates are withdrawn from an emission source at an isokinetic sampling rate and are collected in a multicomponent sampling train. The primary components of the train include a heated probe, three impingers containing derivatizing reagent in toluene, an empty impinger, an impinger containing charcoal, and an impinger containing silica gel.

2.2 The liquid impinger contents are recovered, concentrated to dryness under vacuum, brought to volume with acetonitrile (ACN) and analyzed with a high pressure liquid chromatograph (HPLC).

3.0 Definitions [Reserved]

4.0 Interferences

4.1 The greatest potential for interference comes from an impurity in the derivatizing reagent, 1-(2-pyridyl)piperazine (1,2-PP). This compound may interfere with the resolution of MI from the peak attributed to unreacted 1,2-PP.

4.2 Other interferences that could result in positive or negative bias are (1) alcohols that could compete with the 1,2-PP for reaction with an isocyanate and (2) other compounds that may co-elute with one or more of the derivatized isocyanates.

4.3 Method interferences may be caused by contaminants in solvents, reagents, glassware, and other sample processing hardware. All these materials must be routinely shown to be free from interferences under conditions of the analysis by preparing and analyzing laboratory method (or reagent) blanks.

4.3.1 Glassware must be cleaned thoroughly before using. The glassware should be washed with laboratory detergent in hot water followed by rinsing with tap water and distilled water. The glassware may be dried by baking in a glassware oven at 400 °C for at least one hour. After the glassware has cooled, it should be rinsed three times with methylene chloride and three times with acetonitrile. Volumetric glassware should not be heated to 400 °C. Instead, after washing and rinsing, volumetric glassware may be rinsed with acetonitrile followed by methylene chloride and allowed to dry in air.

4.3.2 The use of high purity reagents and solvents helps to reduce interference problems in sample analysis.

5.0 Safety

5.1 Organizations performing this method are responsible for maintaining a current awareness file of Occupational Safety and Health Administration (OSHA) regulations regarding safe handling of the chemicals specified in this method. A reference file of material safety data sheets should also be made available to all personnel involved in performing the method. Additional references to laboratory safety are available.

6.0 Equipment and Supplies

6.1 Sample Collection. A schematic of the sampling train used in this method is shown in Figure 207–1. This sampling train configuration is adapted from Method 5 procedures, and, as such, most of the required equipment is identical to that used in Method 5 determinations. The only new component required is a condenser.

6.1.1 Probe Nozzle. Borosilicate or quartz glass; constructed and calibrated according to Method 5, sections 6.1.1.1 and 10.1, and coupled to the probe liner using a Teflon union; a stainless steel nut is recommended for this union. When the stack temperature exceeds 210 °C (410 °F), a one-piece glass nozzle/liner assembly must be used.

6.1.2 Probe Liner. Same as Method 5, section 6.1.1.2, except metal liners shall not be used. Water-cooling of the stainless steel sheath is recommended at temperatures exceeding 500 °C (932 °F). Teflon may be used in limited applications where the minimum stack temperature exceeds 120 °C (250 °F) but never exceeds the temperature where Teflon is estimated to become unstable [approximately 210 °C (410 °F)].

6.1.3 Pitot Tube, Differential Pressure Gauge, Filter Heating System, Metering System, Barometer, Gas Density Determination Equipment. Same as Method 5, sections 6.1.1.3, 6.1.1.4, 6.1.1.6, 6.1.1.9, 6.1.2, and 6.1.3.

6.1.4 Impinger Train. Glass impingers are connected in series with leak-free ground-glass joints following immediately after the heated probe. The first impinger shall be of the Greenburg-Smith design with the standard tip. The remaining five impingers shall be of the modified Greenburg-Smith design, modified by replacing the tip with a 1.3-cm (½-in.) I.D. glass tube extending about 1.3 cm (½ in.) from the bottom of the outer cylinder. A water-jacketed condenser is placed between the outlet of the first impinger and the inlet to the second impinger to reduce the evaporation of toluene from the first impinger.

6.1.5 Moisture Measurement. For the purpose of calculating volumetric flow rate and isokinetic sampling, you must also collect either Method 4 in Appendix A–3 to this part or other moisture measurement methods approved by the Administrator concurrent with each Method 326 test run.

6.2 Sample Recovery

6.2.1 Probe and Nozzle Brushes; Polytetrafluoroethylene (PTFE) bristle brushes with stainless steel wire or PTFE handles are required. The probe brush shall have extensions constructed of stainless steel, PTFE, or inert material at least as long as the probe. The brushes shall be properly sized and shaped to brush out the probe liner and the probe nozzle.

6.2.2 Wash Bottles. Three. PTFE or glass wash bottles are recommended; polyethylene wash bottles must not be used because organic contaminants may be extracted by exposure to organic solvents used for sample recovery.

6.2.3 Glass Sample Storage Containers. Chemically resistant, borosilicate amber glass bottles, 500-mL or 1,000-mL. Bottles should be tinted to prevent the action of light on the sample. Screw-cap liners shall be either PTFE or constructed to be leak-free and resistant to chemical attack by organic recovery solvents. Narrow-mouth glass bottles have been found to leak less frequently.

6.2.4 Graduated Cylinder. To measure impinger contents to the nearest 1 ml or 1 g. Graduated cylinders shall have subdivisions not >2 mL.

6.2.5 Plastic Storage Containers. Screw-cap polypropylene or polyethylene containers to store silica gel and charcoal.

6.2.6 Funnel and Rubber Policeman. To aid in transfer of silica gel or charcoal to container (not necessary if silica gel is weighed in field).

6.2.7 Funnels. Glass, to aid in sample recovery.

6.3 Sample Preparation and Analysis. The following items are required for sample analysis.

6.3.1 Rotary Evaporator. Buchii Model EL–130 or equivalent.

6.3.2 1000 ml Round Bottom Flask for use with a rotary evaporator.

6.3.3 Separatory Funnel. 500-ml or larger, with PTFE stopcock.

6.3.4 Glass Funnel. Short-stemmed or equivalent.

6.3.5 Vials. 15-ml capacity with PTFE lined caps.

6.3.6 Class A Volumetric Flasks. 10-ml for bringing samples to volume after concentration.

6.3.7 Filter Paper. Qualitative grade or equivalent.

6.3.8 Buchner Funnel. Porcelain with 100 mm ID or equivalent.

6.3.9 Erlenmeyer Flask. 500-ml with side arm and vacuum source.

6.3.10 HPLC with at least a binary pumping system capable of a programmed gradient.

6.3.11 Column Systems Column systems used to measure isocyanates must be capable of achieving separation of the target compounds from the nearest eluting compound or interferents with no more than 10 percent peak overlap.

6.3.12 Detector. UV detector at 254 nm. A fluorescence detector (FD) with an excitation of 240 nm and an emission at 370 nm may be also used to allow the detection of low concentrations of isocyanates in samples.

6.3.13 Data system for measuring peak areas and retention times.

7.0 Reagents and Standards

7.1 Sample Collection Reagents.

7.1.1 Charcoal. Activated, 6–16 mesh. Used to absorb toluene vapors and prevent them from entering the metering device. Use once with each train and discard.

7.1.2 Silica Gel and Crushed Ice. Same as Method 5, sections 7.1.2 and 7.1.4 respectively

7.1.3 Impinger Solution. The impinger solution is prepared by mixing a known amount of 1-(2-pyridyl) piperazine (purity 99.5+%) in toluene (HPLC grade or equivalent). The actual concentration of 1,2-PP should be approximately four times the amount needed to ensure that the capacity of the derivatizing solution is not exceeded. This amount shall be calculated from the stoichiometric relationship between 1,2-PP and the isocyanate of interest and preliminary information about the concentration of the isocyanate in the stack emissions. A concentration of 130 µg/ml of 1,2-PP in toluene can be used as a reference point. This solution shall be prepared, stored in a refrigerated area away from light, and used within ten days of preparation.

7.2 Sample Recovery Reagents.

7.2.1 Toluene. HPLC grade is required for sample recovery and cleanup (see **Note** to 7.2.2 below).

7.2.2 Acetonitrile. HPLC grade is required for sample recovery and cleanup. **Note:** Organic solvents stored in metal containers may have a high residue blank and should not be used. Sometimes suppliers transfer solvents from metal to glass bottles; thus blanks shall be run before field use and only solvents with a low blank value should be used.

7.3 Analysis Reagents. Reagent grade chemicals should be used in all tests. All reagents shall conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available.

7.3.1 Toluene, $C_6H_5CH_3$. HPLC Grade or equivalent.

7.3.2 Acetonitrile, CH_3CN (ACN). HPLC Grade or equivalent.

7.3.3 Methylene Chloride, CH_2Cl_2. HPLC Grade or equivalent.

7.3.4 Hexane, C_6H_{14}. HPLC Grade or equivalent.

7.3.5 Water, H_2O. HPLC Grade or equivalent.

7.3.6 Ammonium Acetate, $CH_3CO_2NH_4$.

7.3.7 Acetic Acid (glacial), CH_3CO_2H.

7.3.8 1-(2-Pyridyl)piperazine, (1,2-PP), ≥99.5% or equivalent.

7.3.9 Absorption Solution. Prepare a solution of 1-(2-pyridyl)piperazine in toluene at a concentration of 40 mg/300 ml. This solution is used for method blanks and method spikes.

7.3.10 Ammonium Acetate Buffer Solution (AAB). Prepare a solution of ammonium acetate in water at a concentration of 0.1 M by transferring 7.705 g of ammonium acetate to a 1,000 ml volumetric flask and diluting to volume with HPLC Grade water. Adjust pH to 6.2 with glacial acetic acid.

8.0 Sample Collection, Storage and Transport

Note: Because of the complexity of this method, field personnel should be trained in and experienced with the test procedures in order to obtain reliable results.

8.1 Sampling

8.1.1 Preliminary Field Determinations. Same as Method 5, section 8.2.

8.1.2 Preparation of Sampling Train. Follow the general procedure given in Method 5, section 8.3.1, except for the following variations: Place 300 ml of the impinger absorbing solution in the first impinger and 200 ml each in the second and third impingers. The fourth impinger shall remain empty. The fifth and sixth impingers shall have 400 g of charcoal and 200–300 g of silica gel, respectively. Alternatively, the charcoal and silica gel may be combined in the fifth impinger. Set-up the train as in Figure 326–1. During assembly, do not use any silicone grease on ground-glass joints.

Note: During preparation and assembly of the sampling train, keep all openings where contamination can occur covered with PTFE film or aluminum foil until just before assembly or until sampling is about to begin.

8.1.3 Leak-Check Procedures. Follow the leak-check procedures given in Method 5, sections 8.4.2 (Pretest Leak-Check), 8.4.3 (Leak-Checks During the Sample Run), and 8.4.4 (Post-Test Leak-Check), with the exception that the pre-test leak-check is mandatory

8.1.4 Sampling Train Operation. Follow the general procedures given in Method 5, section 8.5. Turn on the condenser coil coolant recirculating pump and monitor the gas entry temperature. Ensure proper gas entry temperature before proceeding and again before any sampling is initiated. It is important that the gas entry temperature not exceed 50 °C (122 °F), thus reducing the loss of toluene from the first impinger. For each run, record the data required on a data sheet such as the one shown in Method 5, Figure 5–3.

8.2 Sample Recovery. Allow the probe to cool. When the probe can be handled safely, wipe off all external particulate matter near the tip of the probe nozzle and place a cap over the tip to prevent losing or gaining particulate matter. Do not cap the probe tip tightly while the sampling train is cooling down because this will create a vacuum in the train. Before moving the sample train to the cleanup site, remove the probe from the sample train and cap the opening to the probe, being careful not to lose any condensate that might be present. Cap the impingers and transfer the probe and the impinger/condenser assembly to the cleanup area. This area should be clean and protected from the weather to reduce sample contamination or loss. Inspect the train prior to and during disassembly and record any abnormal conditions. It is not necessary to measure the volume of the impingers for the purpose of moisture determination as the method is not validated for moisture determination. Treat samples as follows:

8.2.1 Container No. 1, Probe and Impinger Numbers 1 and 2. Rinse and brush the probe/nozzle first with toluene twice and then twice again with acetonitrile and place the wash into a glass container labeled with the test run identification and ''Container No. 1.'' When using these solvents ensure that proper ventilation is available. Quantitatively transfer the liquid from the first two impingers and the condenser into Container No. 1. Rinse the impingers and all connecting glassware twice with toluene and then twice again with acetonitrile and transfer the rinses into Container No. 1. After all components have been collected in the container, seal the container, and mark the liquid level on the bottle.

8.2.2 Container No. 2, Impingers 3 and 4. Quantitatively transfer the liquid from each impinger into a glass container labeled with the test run identification and ''Container No. 2.'' Rinse each impinger and all connecting glassware twice with toluene and twice again with acetonitrile and transfer the rinses into Container No. 2. After all components have been collected in the container, seal the container, and mark the liquid level on the bottle.

Note: The contents of the fifth and sixth impinger (silica gel) can be discarded.

8.2.3 Container No. 3, Reagent Blank. Save a portion of both washing solutions (toluene/acetonitrile) used for the cleanup as a blank. Transfer 200 ml of each solution directly from the wash bottle being used and combine in a glass sample container with the test identification and ''Container No. 3.'' Seal the container, and mark the liquid level on the bottle and add the proper label.

8.2.4 Field Train Proof Blanks. To demonstrate the cleanliness of sampling train glassware, you must prepare a full sampling train to serve as a field train proof blank just as it would be prepared for sampling. At a minimum, one complete sampling train will be assembled in the field staging area, taken to the sampling area, and leak-checked. The probe of the blank train shall be heated during and the train will be recovered as if it were an actual test sample. No gaseous sample will be passed through the sampling train. Field blanks are recovered in the same manner as described in sections 8.2.1 and 8.2.2 and must be submitted with the field samples collected at each sampling site.

8.2.5 Field Train Spike. To demonstrate the effectiveness of the sampling train, field handling, and recovery procedures you must prepare a full sampling train to serve as a field train spike just as it would be prepared for sampling. The field spike is performed in the same manner as the field train proof blank with the additional step of adding the Field Spike Solution to the first impinger after the initial leak check. The train will be recovered as if it were an actual test sample. No gaseous sample will be passed through the sampling train. Field train spikes are recovered in the same manner as described in sections 8.2.1 and 8.2.2 and must be submitted with the samples collected for each test program.

8.3 Sample Transport Procedures. Containers must remain in an upright position at all times during shipment. Samples must also be stored at <4 °C between the time of sampling and concentration. Each sample should be extracted and concentrated within 30 days after collection and analyzed within 30 days after extraction. The extracted sample must be stored at 4 °C.

8.4 Sample Custody. Proper procedures and documentation for sample chain of custody are critical to ensuring data integrity. The chain of custody procedures in ASTM D4840–99 (Reapproved 2018)[e] ''Standard Guide for Sampling Chain-of-Custody Procedures'' (incorporated by reference, see § 63.14) shall be followed for all samples (including field samples and blanks).

9.0 Quality Control

9.1 Sampling. Sampling Operations. The sampling quality control procedures and acceptance criteria are listed in Table 326–2 below; see also section 9.0 of Method 5.

9.2 Analysis. The analytical quality control procedures required for this method includes the analysis of the field train proof blank, field train spike, and reagent and method blanks. Analytical quality control procedures and acceptance criteria are listed in Table 326–3 below.

9.2.1 Check for Breakthrough. Recover and determine the isocyanate(s) concentration of the last two impingers separately from the first two impingers.

9.2.2 Field Train Proof Blank. Field blanks must be submitted with the samples collected at each sampling site.

9.2.3 Reagent Blank and Field Train Spike. At least one reagent blank and a field train spike must be submitted with the samples collected for each test program.

9.2.4 Determination of Method Detection Limit. Based on your instrument's sensitivity and linearity, determine the calibration concentrations or masses that make up a representative low level calibration range. The MDL must be determined at least annually for the analytical system using an MDL study such as that found in section 15.0 to Method 301 of appendix A to part 63 of this chapter.

TABLE 326–2—SAMPLING QUALITY ASSURANCE AND QUALITY CONTROL

QA/QC criteria	Acceptance criteria	Frequency	Consequence if not met
Sampling Equipment Leak Checks.	≤0.00057 m3/min (0.020 cfm) or 4% of sampling rate, whichever is less.	Prior to, during (optional) and at the completion to sampling.	Prior to: Repair and repeat calibration. During/Completion: None, testing should be considered invalid.
Dry Gas Meter Calibration—Pre-Test (individual correction factor—Y_i).	within ±2% of average factor (individual).	Pre-test	Repeat calibration point.
Dry Gas Meter Calibration—Pre-Test (average correction factor—Y_c).	1.00 ±1%	Pre-test	Adjust the dry gas meter and recalibrate.
Dry Gas Meter Calibration—Post-test.	Average dry gas meter calibration factor agrees with ±5% Y_c.	Each Test	Adjust sample volumes using the factor that gives the smallest volume.
Temperature sensor calibration.	Absolute temperature measures by sensor within ±1.5% of a reference sensor.	Prior to initial use and before each test thereafter.	Recalibrate; sensor may not be used until specification is met.
Barometer calibration	Absolute pressure measured by instrument within ±10 mm Hg of reading with a mercury barometer or NIST traceable barometer.	Prior to initial use and before each test thereafter.	Recalibrate; instrument may not be used until specification is met.

TABLE 326–3—ANALYTICAL QUALITY ASSURANCE AND QUALITY CONTROL

QA/QC criteria	Acceptance criteria	Frequency	Consequence if not met
Calibration—Method Blanks	<5% level of expected analyte	Each analytical method blank	Locate source of contamination; reanalyze.
Calibration—Calibration Points	At least six calibration point bracketing the expected range of analysis.	Each analytical batch	Incorporate additional calibration points to meet criteria.
Calibration—Linearity	Correlation coefficient >0.995	Each analytical batch	Verify integration, reintegrate. If necessary, recalibrate.
Calibration—secondary standard verification.	Within ±10% of true value	After each calibration	Repeat secondary standard verification, recalibrate if necessary.
Calibration—continual calibration verification.	Within ±10% of true value	Daily and after every ten samples.	Invalidate previous ten sample analysis, recalibrate and repeat calibration, reanalyze samples until successful.
Sample Analysis	Within the valid calibration range	Each sample	Invalidate the sample if greater than the calibration range and dilute the sample so that it is within the calibration range. Appropriately flag any value below the calibration range.
Replicate Samples	Within ±10% of RPD	Each sample	Evaluate integrations and repeat sample analysis as necessary.
Field Train Proof Blank	≤10% level of expected analyte	Each test program	Evaluate source of contamination.
Field Train Spike	Within ±30% of true value	Each test program	Evaluate performance of the method and consider invalidating results.
Breakthrough	Final two impingers Mass collected is >5% of the total mass or >20% of the total mass when the measured results are 20% of the applicable standard. Alternatively, there is no breakthrough requirement when the measured results are 10% of the applicable standard.	Each test run	Invalidate test run.

10.0 Calibration and Standardization

Note: Maintain a laboratory log of all calibrations.

10.1 Probe Nozzle, Pitot Tube Assembly, Dry Gas Metering System, Probe Heater, Temperature Sensors, Leak-Check of Metering System, and Barometer. Same as Method 5, sections 10.1, 10.2, 10.3, 10.4, 10.5, 8.4.1, and 10.6, respectively.

10.2 High Performance Liquid Chromatograph. Establish the retention times for the isocyanates of interest; retention times will depend on the chromatographic conditions. The retention times provided in Table 10–1 are provided as a guide to relative retention times when using a C18, 250 mm x 4.6 mm ID, 5µm particle size column, a 2 ml/min flow rate of a 1:9 to 6:4 Acetonitrile/Ammonium Acetate Buffer, a 50 µl sample loop, and a UV detector set at 254 nm.

TABLE 326–4—EXAMPLE RETENTION TIMES

Retention times	
Compound	Retention time (minutes)
MI	10.0
1,6-HDI	19.9
2,4-TDI	27.1
MDI	27.3

10.3 Preparation of Isocyanate Derivatives.

10.3.1 HDI, TDI, MDI. Dissolve 500 mg of each isocyanate in individual 100 ml aliquots of methylene chloride ($MeCl_2$), except MDI which requires 250 ml of $MeCl_2$. Transfer a 5-ml aliquot of 1,2-PP (see section 7.3.8) to each solution, stir and allow to stand overnight at room temperature. Transfer 150 ml aliquots of hexane to each solution to precipitate the isocyanate-urea derivative. Using a Buchner funnel, vacuum filter the solid-isocyanate-urea derivative and rinse with 50 ml of hexane. Dissolve the precipitate in a minimum aliquot of $MeCl_2$. Repeat the hexane precipitation and filtration twice. After the third filtration, dry the crystals at 50 °C and transfer to bottles for storage. The crystals are stable for at least 21 months when stored at room temperature in a closed container.

10.3.2 MI. Prepare a 200 µg/ml stock solution of methyl isocyanate-urea, transfer 60 mg of 1,2-PP to a 100-ml volumetric flask containing 50 ml of $MeCl_2$. Carefully transfer 20 mg of methyl isocyanate to the volumetric flask and shake for 2 minutes. Dilute the solution to volume with $MeCl_2$ and transfer to a bottle for storage. Methyl isocyanate does not produce a solid derivative and standards must be prepared from this stock solution.

10.4 Preparation of calibration standards. Prepare a 100 µg/ml stock solution of the isocyanates of interest from the individual isocyanate-urea derivative as prepared in sections 10.3.1 and 10.3.2. This is accomplished by dissolving 1 mg of each isocyanate-urea derivative in 10 ml of Acetonitrile. Calibration standards are prepared from this stock solution by making appropriate dilutions of aliquots of the stock into Acetonitrile.

10.5 Preparation of Method Blanks. Prepare a method blank for each test program (up to twenty samples) by transferring 300 ml of the absorption solution to a 1,000-ml round bottom flask and concentrate as outlined in section 11.2.

10.6 Preparation of Field Spike Solution. Prepare a field spike solution for every test program in the same manner as calibration standards (see Section 10.4). The mass of the target isocyanate in the volume of the spike solution for the field spike train shall be equivalent to that estimated to be captured from the source concentration for each compound; alternatively, you may also prepare a solution that represents half the applicable standard.

10.7 HPLC Calibrations. See Section 11.1.

11.0 Analytical Procedure

11.1 Analytical Calibration. Perform a multipoint calibration of the instrument at six or more upscale points over the desired quantitative range (multiple calibration ranges shall be calibrated, if necessary). The field samples analyzed must fall within at least one of the calibrated quantitative ranges and meet the performance criteria specified below. The lowest point in your calibration curve must be at least 5, and preferably 10, times the MDL. For each calibration curve, the value of the square of the linear correlation coefficient, *i.e.,* r^2, must be ≥0.995, and the analyzer response must be within ±10 percent of the reference value at each upscale calibration point. Calibrations must be performed on each day of the analysis, before analyzing any of the samples. Following calibration, a secondary standard shall be analyzed. A continual calibration verification (CCV) must also be performed prior to any sample and after every ten samples. The measured value of this independently prepared standard must be within ±10 percent of the expected value. Report the results for each calibration standard secondary standard, and CCV as well as the conditions of the HPLC. The reports should include at least the peak area, height, and retention time for each isocyanate compound measured as well as a chromatogram for each standard.

11.2 Concentration of Samples. Transfer each sample to a 1,000-ml round bottom flask. Attach the flask to a rotary evaporator and gently evaporate to dryness under vacuum in a 65 °C water bath. Rinse the round bottom flask three times each with 2 ml of acetonitrile and transfer the rinse to a 10-ml volumetric flask. Dilute the sample to volume with acetonitrile and transfer to a 15-ml vial and seal with a PTFE lined lid. Store the vial ≤4 °C until analysis.

11.3 Analysis. Analyze replicative samples by HPLC, using the appropriate conditions established in section 10.2. The width of the retention time window used to make identifications should be based upon measurements of actual retention time variations of standards over the course of a day. Three times the standard deviation of a retention time for a compound can be used to calculate a suggested window size; however, the experience of the analyst should weigh heavily in the interpretation of the chromatograms. If the peak area exceeds the linear range of the calibration curve, the sample must be diluted with acetonitrile and reanalyzed. Average the replicate results for each run. For each sample you must report the same information required for analytical calibrations (Section 11.1). For non-detect or values below the detection limit of the method, you shall report the value as ''<'' numerical detection limit.

12.0 Data Analysis and Calculations

Nomenclature and calculations, same as in Method 5, section 6, with the following additions below.

12.1 Nomenclature.

AS = Response of the sample, area counts.
b = Y-intercept of the linear regression line, area counts.
BR = Percent Breakthrough
C_A = Concentration of a specific isocyanate compound in the initial sample, µg/ml.
C_B = Concentration of a specific isocyanate compound in the replicate sample, µg/ml.
C_I = Concentration of a specific isocyanate compound in the sample, µg/ml.
C_{rec} = Concentration recovered from spike train, µg/ml.
C_S = Concentration of isocyanate compound in the stack gas, µg/dscm
C_T = Concentration of a specific isocyanate compound (Impingers 1–4), µg/dscm
C_{spike} = Concentration spiked, µg/ml.
C_4 = Concentration of a specific isocyanate compound (Impingers 14), µg/dscm
FI_m = Mass of Free Isocyanate
FTS_{rec} = Field Train Spike Recovery
I_m = Mass of the Isocyanate
I_{mw} = MW of the Isocyanate
IU_m = Mass of Isocyanate-urea derivative
IU_{mw} = MW of the isocyanate-urea
M = Slope of the linear regression line, area counts-ml/µg.
m_I = Mass of isocyanate in the total sample
MW = Molecular weight
RPD = Relative Percent Difference
VF = Final volume of concentrated sample, typically 10 ml.
Vm_{std} = Volume of gas sample measured by the dry-gas meter, corrected to standard conditions, dscm (dscf).

Conversion from Isocyanate to the Isocyanate-urea derivative. The equation for converting the amount of free isocyanate to the corresponding amount of isocyanate-urea derivative is as follows:

12.2 Conversion from Isocyanate to the Isocyanate-urea derivative. The equation for converting the amount of free isocyante to the corresponding amount of isocyante-urea derivative is as follows:

$$IU_m = I_m \frac{IU_{mw}}{I_{mw}} \qquad \text{Eq. 326-1}$$

The equation for converting the amount of IU derivative to the corresponding amount of FL_m is as follows:

$$I_m = IU_m \frac{I_{mw}}{IU_{mw}} \qquad \text{Eq. 326-2}$$

12.3 Calculate the correlation coefficient, slope, and intercepts for the calibration data

using the least squares method for linear regression. Concentrations are expressed as the x-variable and response is expressed as the y-variable.

12.4 Calculate the concentration of isocyanate in the sample:

$$C_I = \frac{As - b}{M} \qquad \text{Eq. 326-3}$$

12.5 Calculate the total amount collected in the sample by multiplying the concentration (µg/ml) times the final volume of acetonitrile (10 ml).

$$m_I = CI \times V_f \qquad \text{Eq. 326-4}$$

12.6 Calculate the concentration of isocyanate (µg/dscm) in the stack gas.

$$C_s = \frac{M_I}{Vm_{std}} K \qquad \text{Eq. 326-5}$$

12.7 Calculate Relative Percent Difference (RPD) for each replicative sample

$$\%RPD = \left| \frac{(C_A - C_B)}{(C_A + C_B)/2} \right| x\ 100$$

Eq. 326-6

12.8 Calculate Field Train Spike Recovery

$$FTS_{rec} = \left[\frac{C_{rec}}{C_{spike}} \right] \times 100$$

Eq. 326-7

12.9 Calculate Percent Breakthrough

$$BR = \left[\frac{C_4}{C_T} \right] \times 100 \qquad \text{Eq. 326-8}$$

Where:

K = 35.314 ft^3/m^3 if Vm(std) is expressed in English units. = 1.00 m^3/m^3 if Vm(std) is expressed in metric units.

13.0 Method Performance

Evaluation of sampling and analytical procedures for a selected series of compounds must meet the quality control criteria (See Section 9) for each associated analytical determination. The sampling and analytical procedures must be challenged by the test compounds spiked at appropriate levels and carried through the procedures.

14.0 Pollution Prevention [Reserved]

15.0 Waste Management [Reserved]

16.0 Alternative Procedures [Reserved]

17.0 References

1. Martin, R.M., Construction Details of Isokinetic Source-Sampling Equipment, Research Triangle Park, NC, U.S. Environmental Protection Agency, April 1971, PB–203 060/BE, APTD–0581, 35 pp.
2. Rom, J.J., Maintenance, Calibration, and Operation of Isokinetic Source Sampling Equipment, Research Triangle Park, NC, U.S. Environmental Protection Agency, March 1972, PB–209 022/BE, APTD–0576, 39 pp.
3. Schlickenrieder, L.M., Adams, J.W., and Thrun, K.E., Modified Method 5 Train and Source Assessment Sampling System: Operator's Manual, U.S. Environmental Protection Agency, EPA/600/8–85/003/1985).
4. Shigehara, R.T., Adjustments in the EPA Nomograph for Different Pitot Tube Coefficients and Dry Molecular Weights, Stack Sampling News, 2:4–11 (October 1974).
5. U.S. Environmental Protection Agency, 40 CFR part 60, Appendices A–1, A–2, and A–3, Methods 1–5.
6. Vollaro, R.F., A Survey of Commercially Available Instrumentation for the Measurement of Low-Range Gas Velocities, Research Triangle Park, NC, U.S. Environmental Protection Agency, Emissions Measurement Branch, November 1976 (unpublished paper).

18.0 Diagrams

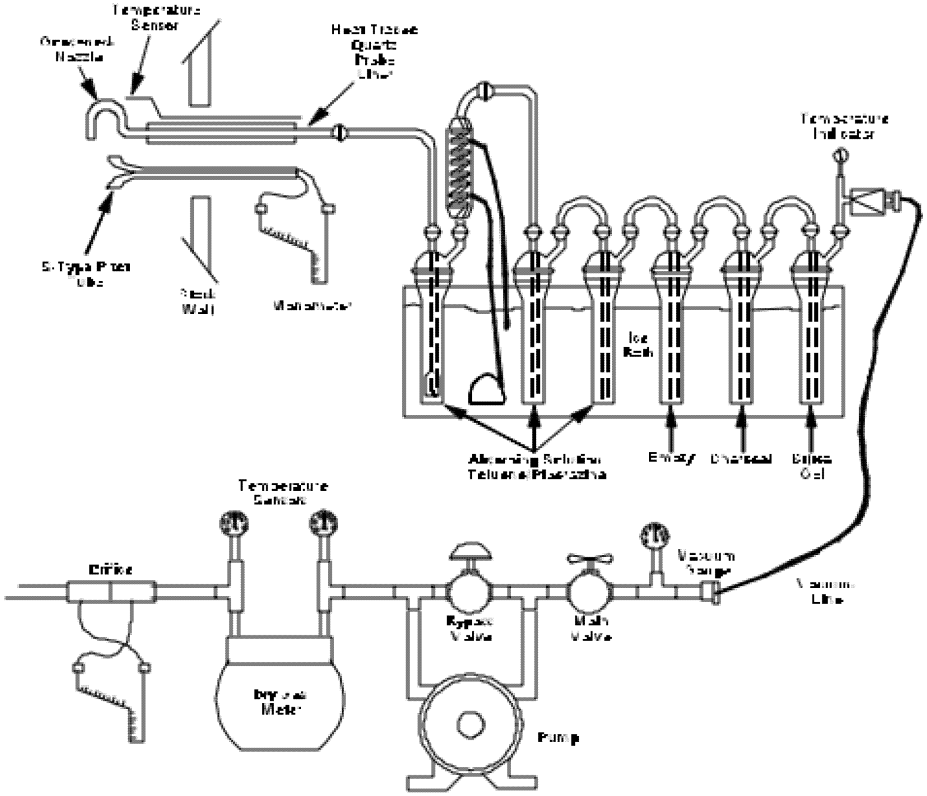

Figure 326-1—Method 326 Sampling Train

[FR Doc. 2019–01902 Filed 3–1–19; 8:45 am]

BILLING CODE 6560–50–P

Consideration supporting this determination is available in the docket where indicated under **ADDRESSES**.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.T05–1065 to read as follows:

§ 165.T05–1065 Safety Zone; Oregon Inlet, Dare County, NC.

(a) *Location.* The following area is a safety zone: all navigable waters of Oregon Inlet, within 100 yards of active demolition work and demolition equipment, along the old Herbert C. Bonner Bridge, which follows a line beginning at approximate position 35°46′47″ N, 75°32′41″ W, then southeast to 35°46′37″ N, 75°32′33″ W, then southeast to 35°46′09″ N, 75°31′59″ W, then southeast to 35°46′03″ N, 75°31′51″ W, then southeast to 35°46′01″ N, 75°31′40″ W (NAD 1983) in Dare County, NC.

(b) *Definitions.* As used in this section—

Designated representative means a Coast Guard Patrol Commander, including a Coast Guard commissioned, warrant, or petty officer designated by the Captain of the Port North Carolina (COTP) for the enforcement of the safety zone.

Captain of the Port means the Commander, Sector North Carolina.

Demolition crews means persons and vessels involved in support of demolition.

(c) *Regulations.* (1) The general regulations governing safety zones in § 165.23 apply to the area described in paragraph (a) of this section.

(2) With the exception of demolition crews, entry into or remaining in this safety zone is prohibited.

(3) All vessels within this safety zone when this section becomes effective must depart the zone immediately.

(4) The Captain of the Port, North Carolina can be reached through the Coast Guard Sector North Carolina Command Duty Officer, Wilmington, North Carolina at telephone number 910–343–3882.

(5) The Coast Guard and designated security vessels enforcing the safety zone can be contacted on VHF–FM marine band radio channel 13 (165.65 MHz) and channel 16 (156.8 MHz).

(d) *Enforcement.* The U.S. Coast Guard may be assisted in the patrol and enforcement of the safety zone by Federal, State, and local agencies.

(e) *Enforcement period.* This regulation will be enforced from March 4, 2019, through March 30, 2020.

(f) *Public notification.* The Coast Guard will notify the public of the active enforcement times at least 48 hours in advance by transmitting Broadcast Notice to Mariners via VHF–FM marine channel 16.

Dated: March 4, 2019.

Bion B. Stewart,

Captain, U. S. Coast Guard Captain of the Port North Carolina.

[FR Doc. 2019–04219 Filed 3–7–19; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 52

[EPA–HQ–OAR–2018–0595; FRL–9990–33–OAR]

RIN 2060–AU08

Emissions Monitoring Provisions in State Implementation Plans Required Under the NO_X SIP Call

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is revising some of the regulations that were originally promulgated in 1998 to implement the NO_X SIP Call. The revisions give covered states greater flexibility concerning the form of the nitrogen oxides (NO_X) emissions monitoring requirements that the states must include in their state implementation plans (SIPs) for certain emissions sources. Other revisions remove obsolete provisions and clarify the remaining regulations but do not substantively alter any current regulatory requirements.

DATES: This rule is effective as of March 8, 2019.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2018–0595. All documents in the docket are listed on the *http://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: David Lifland, Clean Air Markets Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, MC 6204M, 1200 Pennsylvania Avenue NW, Washington, DC 20460; 202–343–9151; *lifland.david@epa.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Overview of the Action

This section provides an overview of the action, including a summary of the amendments and their estimated impacts as well as information concerning potentially affected entities and statutory authority.

Section II provides a summary of the proposal for this action, including background information. In section III, EPA summarizes and responds to comments received on the proposal. EPA's final action is set forth in section IV, and section V discusses the estimated impacts of the amendments. Section VI addresses reviews required under various statutes and executive orders as well as determinations concerning applicable rulemaking and judicial review provisions.

A. Summary of Amendments and Estimated Impacts

On September 27, 2018, EPA published in the **Federal Register** a proposal [1] to amend the existing NO_X SIP Call regulations [2] to allow states to amend their SIPs, for NO_X SIP Call purposes only, to establish emissions monitoring requirements for certain units other than requirements to monitor according to 40 CFR part 75. This action finalizes the amendment generally as proposed, with minor further revisions discussed in section IV of this document. Ultimately, such alternate monitoring requirements could be made available to sources through states' revisions to their SIPs, with consequent potential reductions in some units' monitoring costs. The group of units affected under the SIPs adopted to meet the NO_X SIP Call comprises both existing and new electricity generating units (EGUs) as well as certain other existing and new industrial units (non-EGUs). Within this overall group, the set of existing units potentially affected by the amendment includes approximately 285 non-EGU boilers and combustion turbines and approximately 30 EGUs—specifically, combustion turbines that are considered large EGUs for NO_X SIP Call purposes and that are not required to monitor according to part 75 under other programs such as the Acid Rain Program or a Cross-State Air Pollution Rule (CSAPR) trading program. States, not EPA, will decide whether to revise the monitoring requirements in their SIPs as allowed under this amendment, and EPA lacks complete information on the remaining monitoring requirements that the sources would face if a state decides to make such revisions, leaving considerable uncertainty regarding the amount of monitoring cost reductions that may occur. However, using information from comments and assumptions concerning the sources' remaining monitoring requirements, EPA estimates annual monitoring cost reductions from this action in the range of $1.2 million to $3.3 million. Because this action is not expected to cause any change in emissions or air quality, the monitoring cost reductions will constitute net benefits from the action.

In addition, EPA is eliminating several obsolete provisions of the NO_X SIP Call regulations that no longer have any substantive effect on the regulatory requirements faced by states or sources and is making clarifying amendments—all of which EPA considers non-substantive—to the remaining regulations. The additional amendments also include updates to several cross-references in the CSAPR regulations that refer to an obsolete provision of the NO_X SIP Call regulations. The specific additional amendments discussed in the proposal are identified in section II.C. of this document, and the amendments are being finalized generally as proposed, with minor further revisions discussed in section IV of this document.

B. Potentially Affected Entities

This action does not apply directly to any emissions sources but instead amends existing regulatory requirements applicable to the SIPs of Alabama, Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia, and the District of Columbia. If an affected jurisdiction chooses to revise its SIP in response to these amendments, sources in the jurisdiction could be indirectly affected if they are subject to emissions monitoring requirements for purposes of the NO_X SIP Call and are not independently subject to comparable requirements under another program such as the Acid Rain Program or a CSAPR trading program. Generally, the types of sources that could be indirectly affected are fossil fuel-fired boilers and stationary combustion turbines with heat input capacities over 250 million British thermal units per hour (mmBtu/hr) or serving electricity generators with capacities over 25 megawatts (MW). Sources meeting these criteria operate in a variety of industries, including but not limited to the following:

NAICS * code	Examples of industries with potentially affected sources
221112 ...	Fossil fuel-fired electric power generation.
3112	Grain and oilseed milling.
3221	Pulp, paper, and paperboard mills.
3241	Petroleum and coal products manufacturing.
3251	Basic chemical manufacturing.
3311	Iron and steel mills and ferroalloy manufacturing.
6113	Colleges, universities, and professional schools.

* North American Industry Classification System.

C. Statutory Authority

Statutory authority for this action is provided by Clean Air Act (CAA) sections 110 and 301, 42 U.S.C. 7410 and 7601, which also provided statutory authority for issuance of the existing NO_X SIP Call regulations that EPA is amending in this action.[3]

II. Summary of the Proposal

This section summarizes the proposal for this action. Section II.A. repeats some of the background information from the proposal. Section II.B. addresses the proposed amendment to the NO_X SIP Call's emissions monitoring requirements, reiterating the proposed rationale and summarizing the proposal's discussion of projected impacts. Sections II.C. and II.D. summarize the remaining proposed amendments and describe the public comment process.

A. Background

Under the CAA, EPA establishes and periodically revises national ambient air quality standards (NAAQS) for certain pollutants, including ground-level ozone, while states have primary responsibility for attaining the NAAQS through the adoption of emission control measures in their SIPs. Under CAA section 110(a)(2)(D)(i)(I), 42 U.S.C. 7410(a)(2)(D)(i)(I), often called the ''good neighbor'' provision, each state is

[1] Emissions Monitoring Provisions in State Implementation Plans Required Under the NO_X SIP Call, Proposed Rule, 83 FR 48751 (Sept. 27, 2018).

[2] Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone (NO_X SIP Call), 63 FR 57356 (Oct. 27, 1998) (codified in relevant part at 40 CFR 51.121 and 51.122). Amendments to the NO_X SIP Call regulations made between issuance and implementation are described in the proposal for this action, 83 FR at 48755 & nn.11–15.

[3] *See, e.g.,* 63 FR at 57366, 57479.

required to include provisions in its SIP prohibiting emissions that ''will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any [NAAQS].'' In 1998, EPA issued the NO_X SIP Call (the Rule) identifying good neighbor obligations with respect to the 1979 1-hour ozone NAAQS and calling for SIP revisions to address those obligations.[4] The Rule's regulatory text was codified at 40 CFR 51.121, addressing the required SIP revisions, and 40 CFR 51.122, addressing states' periodic reporting requirements. As implemented, the Rule required 20 states and the District of Columbia [5] to revise their SIPs to reduce their sources' emissions of NO_X, an ozone precursor, during the May–September ''ozone season'' starting in 2004.

To implement the NO_X SIP Call's emissions reduction requirements, EPA promulgated a ''budget'' for the statewide seasonal NO_X emissions from each covered state. Each state's emissions budget was calculated as the state's projected 2007 pre-control or ''baseline'' emissions inventory minus the state's required emissions reduction. The Rule did not mandate that states follow any particular approach for achieving their required emissions reductions. Instead, states retained wide discretion regarding which sources in their states to control and what control measures to employ. Each state was simply required to demonstrate that whatever control measures it chose to include in its SIP revision would be sufficient to ensure that projected 2007 statewide seasonal NO_X emissions from its sources would not exceed its emissions budget.

Besides the general flexibility given to states regarding the choices of sources and control measures, the NO_X SIP Call included additional provisions designed to increase compliance flexibility. Most notably, the Rule allowed states to adopt interstate emission allowance trading programs as control measures to accomplish some or all of the required emissions reductions. EPA also provided a model rule for an EPA-administered interstate trading program—the NO_X Budget Trading Program (NBTP)—that would meet all the Rule's SIP approval criteria for a trading program for two types of sources: Fossil fuel-fired EGU boilers and combustion turbines serving electricity generators with capacity ratings greater than 25 MW (large EGUs), and fossil fuel-fired non-EGU boilers and combustion turbines with heat input ratings greater than 250 mmBtu/hr (large non-EGU boilers and turbines).

While generally oriented toward providing states and sources with compliance flexibility, the NO_X SIP Call also included two conditional provisions that would become mandatory SIP requirements for large EGUs and large non-EGU boilers and turbines if states chose to include any emission control measures for these types of sources in their SIP revisions. First, under § 51.121(f)(2), any control measures imposed on these types of sources would be required to include enforceable limits on the sources' seasonal NO_X mass emissions. These limits could take several forms, including either limits on individual sources or collective limits on the group of all such sources in a state. Second, under § 51.121(i)(4), these sources would be required to monitor and report their seasonal NO_X mass emissions according to the provisions of 40 CFR part 75.[6] One way a state could meet these two SIP requirements was to adopt the NBTP, because the NBTP included provisions addressing both requirements and was expressly designed as a potential control measure for these types of sources.

All the jurisdictions subject to the NO_X SIP Call as implemented ultimately chose to adopt the NBTP for large EGUs and large non-EGU boilers and turbines as part of their required SIP revisions. By adopting control measures applicable to large EGUs and large non-EGU boilers and turbines into their SIPs, all the affected jurisdictions triggered the obligations for their SIPs to include enforceable mass emissions limits and part 75 monitoring requirements for these types of sources. These requirements have remained in effect despite the discontinuation of the NBTP following the 2008 ozone season.[7]

The NBTP was implemented starting in 2003 for sources in several northeastern states and in 2004 for sources in most of the remaining NO_X SIP Call states. Missouri sources joined the NBTP in 2007, and EPA continued to administer the NBTP through the 2008 ozone season. Since the 2008 ozone season, EPA has replaced the NBTP with a series of three similar interstate emission allowance trading programs designed to address eastern states' good neighbor obligations with respect to ozone NAAQS more recent than the 1979 1-hour ozone NAAQS. The NBTP's three successor seasonal NO_X trading programs were established under the Clean Air Interstate Rule (CAIR),[8] which was remanded to EPA for replacement; [9] the original CSAPR,[10] which replaced CAIR; and most recently the CSAPR Update.[11] The seasonal NO_X trading programs established under CAIR and the original CSAPR were both designed to address the 1997 8-hour ozone NAAQS, while the trading program established under the CSAPR Update was designed to address the 2008 8-hour ozone NAAQS. The CAIR seasonal NO_X trading program operated from 2009 through 2014, the original CSAPR seasonal NO_X trading program started operating in 2015,[12] and the CSAPR Update trading program started operating in 2017.

For purposes of this action, the most important difference between the NBTP and its successor seasonal NO_X trading programs concerns the types of sources participating in the various programs. As discussed above, the NBTP was designed to cover both large EGUs and large non-EGU boilers and turbines. In contrast, by default the three successor trading programs have covered only units considered EGUs under those

[4] 63 FR 57356. As described in the proposal for this action, an amendment to the NO_X SIP Call made before the Rule's implementation indefinitely stayed the additional findings of good neighbor obligations with respect to the 1997 8-hour ozone NAAQS that were included in the Rule as issued. *See* 83 FR at 48755.

[5] The Rule as implemented applies to Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, and West Virginia; portions of Alabama, Michigan, and Missouri; and the District of Columbia. For simplicity, this document often refers to all the jurisdictions with obligations under the CAA and the NO_X SIP Call, including the District of Columbia, as ''states.''

[6] For brevity, this document generally refers to the monitoring, recordkeeping, and reporting requirements in 40 CFR part 75 as ''part 75 monitoring requirements.''

[7] Some states expanded NBTP applicability under their SIPs to include additional sources such as process heaters, cement kilns, and smaller EGUs. Unlike large EGUs and large non-EGU boilers and turbines, the additional sources are not subject to the NO_X SIP Call's ongoing obligation under § 51.121(i)(4) for SIPs to include part 75 monitoring requirements and therefore are not affected by the amendments being finalized in this action.

[8] 70 FR 25162 (May 12, 2005) (SIP requirements); 71 FR 25328 (Apr. 28, 2006) (parallel Federal implementation plan requirements).

[9] *North Carolina* v. *EPA,* 531 F.3d 896 (D.C. Cir. 2008), *modified on rehearing,* 550 F.3d 1176 (D.C. Cir. 2008).

[10] 76 FR 48208 (Aug. 8, 2011); *see also* 76 FR 80760 (Dec. 27, 2011) (adding seasonal NO_X emissions reduction requirements for sources in five states), 79 FR 71663 (Dec. 3, 2014) (tolling implementation dates by three years).

[11] 81 FR 74504 (Oct. 26, 2016). Consolidated challenges to the CSAPR Update are pending in *Wisconsin* v. *EPA,* No. 16–1406 (D.C. Cir. argued Oct. 3, 2018).

[12] The original CSAPR seasonal NO_X trading program remains in effect for sources in Georgia but after 2016 has not applied to sources in any state subject to the NO_X SIP Call as implemented.

programs, which generally means all units that would be classified as NO_X SIP Call large EGUs as well as a small subset of the units that would be classified as NO_X SIP Call large non-EGU boilers and turbines.[13] Under the CAIR seasonal NO_X trading program, most NO_X SIP Call states exercised an option to expand program applicability to include all their NO_X SIP Call large non-EGU boilers and turbines, but the option was eliminated under the original CSAPR seasonal NO_X trading program and no state has exercised the restored option made available under the CSAPR Update trading program. Consequently, at present most NO_X SIP Call large non-EGU boilers and turbines do not participate in a successor trading program to the NBTP.

The second relevant difference between the NBTP and its successor trading programs concerns the various programs' geographic areas of coverage. At present, EGUs in fourteen NO_X SIP Call states participate in the CSAPR Update trading program.[14] EGUs in the remaining seven NO_X SIP Call jurisdictions do not currently participate in a successor trading program to the NBTP, although most such units are subject to other EPA programs with comparable part 75 monitoring requirements.[15]

In the CAIR rulemaking, EPA amended the NO_X SIP Call regulations both to provide that the NBTP would be discontinued upon implementation of the CAIR seasonal NO_X trading program and to require states to adopt replacement control measures into their SIPs to ensure continued achievement of the portions of their NO_X SIP Call emissions reduction requirements that had been met through the NBTP.[16] As noted above, notwithstanding the discontinuation of the NBTP, the NO_X SIP Call's requirements for enforceable mass emissions limits and part 75 monitoring have continued to apply to large EGUs and large non-EGU boilers and turbines in all affected states. Since the CAIR rulemaking, EPA has worked with NO_X SIP Call states individually to assist them in revising their SIPs to meet these ongoing NO_X SIP Call requirements, whether through use of the NBTP's successor trading programs (to the extent those options have been available) or through other replacement control measures.

Under CAA section 107(d)(3)(E), 42 U.S.C. 7407(d)(3)(E), redesignation of an area to attainment of a NAAQS requires a determination that the improvement in air quality is due to ''permanent and enforceable'' emissions reductions. At least 140 EPA final actions redesignating areas in 20 states to attainment with an ozone NAAQS or a fine particulate matter ($PM_{2.5}$) NAAQS—because NO_X is a precursor to $PM_{2.5}$ as well as ozone—have relied in part on the NO_X SIP Call's emissions reductions.[17] In this action, to avoid any possible argument that amendments to the NO_X SIP Call might result in a lessening of permanence and enforceability that could threaten continued reliance on the Rule's emissions reductions to support other actions, EPA is not substantively amending the Rule's key provisions supporting these attributes. These key provisions include the statewide emissions budgets and general enforceability and monitoring requirements as well as the requirements for enforceable limits on seasonal NO_X mass emissions from large EGUs and large non-EGU boilers and turbines.[18] As discussed in section II.B. of this document, EPA believes that under current circumstances, the amendment to allow states to establish alternate monitoring requirements for large EGUs and large non-EGU boilers and turbines does not undermine assurance that the Rule's required emissions reductions will continue to be achieved and therefore does not pose a risk to the permanence and enforceability of the emissions reductions.

B. Proposed Amendment to Emissions Monitoring Requirements

The only substantive amendment to the NO_X SIP Call regulations proposed for this action concerns emissions monitoring requirements. Under 40 CFR 51.121(i)(4) of the regulations as originally promulgated, where a state's SIP revision contains control measures for large EGUs or large non-EGU boilers and turbines, the SIP must also require part 75 monitoring for these types of sources. As discussed in section II.A. of this document, all NO_X SIP Call states triggered this requirement by including control measures in their SIPs for these types of sources, and the requirement has remained in effect despite the discontinuation of the NBTP after the 2008 ozone season. For this action, EPA proposed to amend the provision at § 51.121(i)(4) to make the inclusion of part 75 monitoring requirements for these sources in SIPs optional rather than mandatory for NO_X SIP Call purposes.[19] The SIPs would still need to include some form of emissions monitoring requirements for these types of sources, consistent with the Rule's general enforceability and monitoring requirements at § 51.121(f)(1) and (i)(1), respectively, but states would no longer be required to satisfy these general Rule requirements specifically through the adoption of part 75 monitoring requirements. EPA noted that finalization of this proposed amendment would not in itself eliminate part 75 monitoring requirements for any sources but would enable EPA to approve SIP submittals replacing these requirements for NO_X SIP Call purposes with other forms of monitoring requirements.

In the proposal, EPA discussed the following rationale for the proposed amendment to emissions monitoring requirements.[20] The condition that SIPs must include part 75 monitoring requirements was established based on

[13] For example, under the NO_X SIP Call as implemented, a unit qualifying as exempt from the Acid Rain Program under the provision for cogeneration units at 40 CFR 72.6(b)(4) would be classified as a non-EGU, but in some instances such a unit could be covered under the CAIR, original CSAPR, and CSAPR Update trading programs as an EGU.

[14] The CSAPR Update applies to EGUs in the NO_X SIP Call states of Alabama, Illinois, Indiana, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia as well as eight additional states that are not subject to the NO_X SIP Call as implemented.

[15] EGUs in the NO_X SIP Call jurisdictions of Connecticut, Delaware, Massachusetts, North Carolina, Rhode Island, South Carolina, and the District of Columbia are not subject to the CSAPR Update. All NO_X SIP Call EGUs in North Carolina and South Carolina are required to monitor NO_X mass emissions according to part 75 under a CSAPR trading program for annual NO_X emissions, and most NO_X SIP Call EGUs in the remaining jurisdictions are required to monitor NO_X emission rate and heat input rate according to part 75 under the Acid Rain Program.

[16] 40 CFR 51.121(r); *see also* 40 CFR 51.123(bb) and 52.38(b)(10)(ii) (authorizing use of CAIR and CSAPR Update seasonal NO_X trading programs as NBTP replacement control measures for large non-EGU boilers and turbines).

[17] *See* Redesignation Actions Relying on NO_X SIP Call Emissions Reductions (August 2018), available in the docket for this action. EPA notes that reliance on the Rule's emissions reductions as permanent and enforceable for purposes of redesignation actions has been upheld by multiple courts of appeals. *Sierra Club* v. *EPA,* 774 F.3d 383, 397–99 (7th Cir. 2014); *Sierra Club* v. *EPA,* 793 F.3d 656, 665–68 (6th Cir. 2015).

[18] EPA notes that the implementation rules for both the 1997 ozone NAAQS and the 2008 ozone NAAQS have required that the NO_X SIP Call in general and states' emissions budgets in particular will continue to apply after revocation of the previous NAAQS and have also made clear that any modifications to control requirements approved into a SIP pursuant to the Rule are subject to anti-backsliding requirements under CAA section 110(l), 42 U.S.C. 7410(l). *See* 40 CFR 51.905(f), 51.1105(e).

[19] The amendment would apply only for NO_X SIP Call purposes and would not authorize states to create exceptions to any part 75 monitoring requirements that might apply to a source under a different legal authority.

[20] 83 FR at 48757–58.

determinations that, first, a requirement for mass emissions limits for large EGUs and large non-EGU boilers and turbines was feasible and provided the greatest assurance that the NO_X SIP Call's required emissions reductions would be achieved, and second, part 75 monitoring was a feasible and cost-effective way to ensure compliance with the mass emissions limits for these sources.[21] (Part 75 monitoring requirements were also established independently as an essential element of the now-discontinued NBTP, which like EPA's other emission allowance trading programs could function only with timely reporting of consistent, quality-assured mass emissions data by all participating units.) To ensure that the NO_X SIP Call's emissions reductions can continue to be relied on as permanent and enforceable for purposes of other actions, EPA did not propose to amend the Rule's existing requirements regarding enforceable mass emissions limits for these sources. However, EPA proposed the view that under current circumstances, allowing states to establish alternate monitoring requirements for large EGUs and large non-EGU boilers and turbines would not pose a risk to the permanence and enforceability of the Rule's emissions reductions.

The first relevant current circumstance EPA discussed was the substantial margins by which all NO_X SIP Call states are now complying with the portions of their statewide emissions budgets assigned to large EGUs and large non-EGU boilers and turbines. As shown in Table 1 of the proposal, which is reproduced without change as Table 1 of this document, in 2017, seasonal NO_X emissions from sources that would have been subject to the NBTP across the region covered by the NO_X SIP Call were approximately 200,000 tons, which is less than 40% of the sum of the relevant portions of the statewide final NO_X budgets. Table 1 also shows that no state's reported emissions exceeded 71% of the relevant portion of its budget.[22] As noted by EPA, these comparisons demonstrate that the Rule's required emissions reductions would continue to be achieved even with substantial increases in emissions from current levels. EPA also observed that the possibility of such large increases in emissions is remote because of requirements under other state and Federal environmental programs [23] and changes to the fleet of affected sources since 2008.[24]

TABLE 1—2017 EMISSIONS AND RELEVANT EMISSIONS BUDGET AMOUNTS BY STATE

State	NO_X emissions during the 2017 ozone season (tons) from:				Portion of statewide emissions budget assigned to NBTP sources (tons)
	NBTP sources also subject to part 75 under other programs	Other NBTP large EGUs and large non-EGU boilers and turbines	Other NBTP sources subject to part 75 under NSC SIPs	Total for all NBTP sources	
Alabama (part)	7,166	1,911	0	9,077	25,497
Connecticut	380	10	39	430	4,477
Delaware	324	511	0	835	5,227
District of Columbia	0	20	0	20	233
Illinois	13,038	1,493	0	14,531	35,557
Indiana	20,396	1,201	823	22,419	55,729
Kentucky	19,978	75	0	20,053	36,109
Maryland	2,422	516	0	2,939	15,466
Massachusetts	734	113	32	879	12,861
Michigan (part)	14,580	205	0	14,785	31,247
Missouri (part)	9,486	0	0	9,486	13,459
New Jersey	1,646	310	0	1,956	13,022
New York	4,062	941	611	5,614	41,385
North Carolina	16,352	1,689	0	18,041	34,703
Ohio	20,012	993	0	21,005	49,842
Pennsylvania	13,616	837	0	14,453	50,843
Rhode Island	193	0	0	193	936
South Carolina	5,030	1,043	0	6,074	19,678
Tennessee	7,785	2,350	0	10,135	31,480
Virginia	7,462	589	0	8,051	21,195
West Virginia	18,187	276	0	18,463	29,507
Total	182,849	15,084	1,505	199,438	528,453

Data sources: Emissions data are from EPA's Air Markets Program Database, *https://ampd.epa.gov/ampd*. In a few cases where 2017 data are not available, the most recent available data are used instead. Budget data are from The NO_X Budget Trading Program: 2008 Emission, Compliance, and Market Analyses (July 2009) at 14, available in the docket for this action.

The second relevant current circumstance EPA discussed was that even with the proposed amendment, part 75 monitoring requirements would remain in effect for most NO_X SIP Call large EGUs pursuant to other regulatory requirements, including the Acid Rain Program and the CSAPR trading programs, and these large EGUs are responsible for most of the collective emissions of NO_X SIP Call large EGUs and large non-EGU boilers and turbines.

[21] *See* 63 FR at 57451–52.

[22] Reported 2017 emissions from Missouri sources were just over 70% of the relevant portion of the state's budget.

[23] For example, for the 11 states covered in their entirety under both programs—Illinois, Indiana, Kentucky, Maryland, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia—EGU emissions budgets under the current CSAPR Update seasonal NO_X trading program range from 17% to 66% of the portions of the respective states' NO_X SIP Call statewide budgets based on EGU emissions. *Compare* 40 CFR 97.810(a) (CSAPR Update budgets) *with* 65 FR 11222, 11225 (Mar. 2, 2000) (EGU-based portions of NO_X SIP Call statewide budgets).

[24] For example, sources responsible for over 40% of 2008 emissions reported under the NBTP have either ceased operation or switched from coal combustion to gas or oil combustion since 2008. *See* Post-2008 Changes to Units Reporting Under the NO_X Budget Trading Program (August 2018), available in the docket for this action.

Table 1 shows the portions of the reported seasonal NO_X emissions for each state reported by units that would continue to be subject to part 75 monitoring requirements even if the proposed amendments are finalized and all states choose to revise their SIPs.[25] As indicated in the table, the sources that would continue to report under part 75 account for over 90% of the overall emissions. If a state chooses to revise its SIP to no longer require part 75 monitoring for some sources, then under § 51.121(f)(1) and (i)(1)—which EPA did not propose to amend—the SIP would still have to include provisions requiring all large EGUs and large non-EGU boilers and turbines subject to control measures for purposes of the NO_X SIP Call to submit other forms of information on their seasonal NO_X emissions sufficient to ensure compliance with the control measures. EPA stated the belief that in the context of the substantial compliance margins discussed above, and given the continued availability of part 75 monitoring data from sources responsible for most of the relevant emissions, emissions data from the remaining sources submitted pursuant to other forms of monitoring requirements can provide sufficient assurance that the Rule's overall required emissions reductions will continue to be achieved.

In the proposal's discussion of projected impacts,[26] EPA stated the expectation that the proposed amendments, if finalized, would have no impact on emissions or air quality because no changes would be made to any of the NO_X SIP Call's existing regulatory requirements related to statewide emissions budgets or enforceable mass emissions limits for large EGUs and large non-EGU boilers and turbines.

With respect to cost impacts, EPA expressed the expectation that, if the proposed amendment to monitoring requirements is finalized, at least some states would revise their SIPs to establish alternate monitoring requirements and at least some sources would experience reductions in monitoring costs. EPA indicated that there were approximately 310 existing large EGUs and large non-EGU boilers and turbines in NO_X SIP Call states that could potentially be affected by the proposed amendment to monitoring requirements if all affected states were to revise their SIPs. The discussion also indicated how many of these units used each of the principal monitoring methodologies allowed under part 75 according to the monitoring plans submitted for the units. Specifically, EPA noted that approximately 90 units used monitoring methodologies involving continuous emissions monitoring systems (CEMS) to measure both stack gas flow rate and the concentrations of certain gases in the effluent gas stream, approximately 140 units used methodologies involving gas concentration CEMS but not stack gas flow rate CEMS, and approximately 80 units used non-CEMS methodologies. The proposal noted that it was not possible to predict the amount of the monitoring cost reductions that might eventually result from finalization of the proposed monitoring amendment because states, not EPA, would decide whether to revise the monitoring requirements in their SIPs and because EPA lacks information on the remaining monitoring requirements that sources would face. However, EPA qualitatively discussed how alternate monitoring requirements could result in reduced costs for units currently using the various part 75 monitoring methodologies. For example, some units that currently use part 75 monitoring methodologies involving the use of stack gas flow rate CEMS might be allowed to discontinue use of those CEMS, some units that currently use part 75 monitoring methodologies involving the use of gas concentration CEMS might be allowed to discontinue use of those CEMS, and some units continuing to use one or both types of CEMS might be allowed to perform less extensive data reporting or less comprehensive quality-assurance testing. EPA expressed the expectation that units currently using non-CEMS methodologies under part 75 would experience little or no reduction in monitoring costs as a result of the proposed monitoring amendment.

C. Other Proposed Amendments

In addition to the proposed amendment to the NO_X SIP Call's monitoring requirements discussed in section II.B. of this document, EPA proposed to make several further amendments to the Rule's regulatory text at 40 CFR 51.121 and 51.122 to remove obsolete provisions and clarify the remaining provisions. The proposed revisions also included updates to several cross-references in the CSAPR regulations at 40 CFR 52.38 that refer to an obsolete provision of the NO_X SIP Call regulations. Although EPA proposed to remove or modify numerous provisions of the NO_X SIP Call regulations,[27] the proposal explained that the additional amendments were not intended to substantively alter any currently effective regulatory requirements. Briefly, EPA proposed to:

- Rescind and remove the stayed and superseded findings of good neighbor obligations with respect to the 1997 8-hour ozone NAAQS at § 51.121(a)(2), remove § 51.121(q) staying the now-rescinded findings, and remove obsolete related language in § 51.121(c)(1) and (2);
- Clarify the expression of Phase I and existing final emissions reduction requirements by removing the table of required incremental Phase II emissions reduction amounts at § 51.121(e)(3), adding a column of Phase I budget amounts to the existing table of final budget amounts in § 51.121(e)(2)(i), revising the definitions of ''Phase I SIP submission'' and ''Phase II SIP submission'' at § 51.121(a)(3)(i) and (ii), and making related revisions at § 51.121(b)(1) introductory text and (b)(1)(i);
- Remove § 51.121(e)(4), which governs the former compliance supplement pool;
- Remove § 51.121(e)(5), which sets forth a one-time process for revising the emissions inventories and budgets published as part of the original Rule;
- Remove § 51.121(g)(2)(ii), which contains an obsolete table of baseline emissions inventory information originally intended to help states prepare their required SIP revisions;
- Remove § 51.121(p) and (b)(2), which authorize the use of the former NBTP and other potential interstate trading programs, respectively, as compliance options;
- Make clarifying revisions to § 51.121(r)(2), which sets forth the post-NBTP transition requirements;
- Remove § 51.121(d)(1), which contains obsolete deadlines for Phase I and Phase II SIP submissions, and § 51.121(d)(2), which contains obsolete or duplicative procedural provisions concerning the completeness and format of SIP submissions;
- Remove or update obsolete cross-references in the NO_X SIP Call regulations at §§ 51.121(b)(1)(i), (g)(2)(i) and (r)(1) and (2) and 51.122(c)(1)(ii) and in the CSAPR regulations at

[25] Although the Acid Rain Program does not require units to report NO_X mass emissions specifically, NO_X mass emissions can be calculated from other part 75 data that are required to be reported.

[26] 83 FR at 48761–62.

[27] A redline-strikeout document showing the text of 40 CFR 51.121 and 51.122 with the amendments adopted in this action, which include all the proposed amendments to the NO_X SIP Call regulations with the further revisions discussed in section IV of this document, is available in the docket for this action.

§ 52.38(b)(8)(ii), (b)(8)(iii)(A)(*2*), (b)(9)(ii), and (b)(9)(iii)(A)(*2*); and

• Make clarifying editorial revisions to § 51.121 heading, (b)(1)(ii), (e)(2)(ii)(B) and (E), (f)(2)(i)(B), (f)(2)(ii), (h), (i)(2),(3), and (5), (l)(1) and (2), (m), (n), and (o).

These proposed further amendments as well as EPA's supporting rationales are fully discussed in the proposal.[28] The discussions in the proposal are incorporated herein and are not summarized further in this document except as necessary to respond to comments in sections III.B. through III.D of this document.

D. Public Comment Process

In the proposal, EPA requested comment on the proposed amendment to revise the provision at 40 CFR 51.121(i)(4) to allow states to establish monitoring requirements for large EGUs and large non-EGU boilers and turbines in their SIPs other than part 75 monitoring requirements. With respect to the remaining proposed amendments, EPA made clear that the amendments were not intended to substantively alter existing regulatory requirements and consequently requested comment solely on whether the provisions proposed for removal as obsolete in fact are obsolete and on whether the proposed clarifications in fact achieve clarification. EPA did not reopen for comment any provisions of the existing NO_X SIP Call regulations except the provisions that were proposed to be amended as discussed in the proposal [29] and did not reopen or request comment on amending any other existing regulations. The proposal also provided information on how to request a public hearing. No public hearing was held because none was requested, and the public comment period closed on October 29, 2018.

III. Response to Comments

Commenters on the proposal included states, source owners, industry associations, environmental organizations, and persons commenting as individuals. The comments are available in the docket for this action. In this section, EPA summarizes and responds to the comments regarding the proposed amendments, including requests for clarification. Sections III.A through III.D. address the proposed amendments to the NO_X SIP Call's provisions concerning emissions monitoring requirements, emissions reduction requirements, the baseline emissions inventory table, and post-NBTP transition requirements, respectively.

With respect to the proposed amendments not addressed in sections III.A. through III.D., EPA received no adverse comments or requests for clarification. One commenter stated no objection to or supported most of these amendments individually, and additional commenters expressed general support for all the amendments removing obsolete provisions or all the amendments clarifying the remaining regulations. EPA thanks the commenters for these comments, which are not discussed further in this document.

Some commenters also submitted comments on topics other than the NO_X SIP Call regulations. These comments are outside the scope of the proposal and are not discussed further in this document.

A. Emissions Monitoring Requirements

Comment: Most commenters supported the proposed amendment to the NO_X SIP Call's monitoring requirements. These commenters generally expressed the view that requirements to perform part 75 monitoring solely for purposes of the NO_X SIP Call are no longer necessary to ensure states' compliance with the Rule's emissions reduction requirements. Most of these commenters also generally indicated that allowing the use of alternate monitoring requirements would result in reduced monitoring costs for some sources.

Response: EPA agrees with these comments' support for the proposed amendment to the Rule's monitoring requirements.

Comment: Some commenters, while generally supporting the proposed monitoring amendment, stated that EPA should also make further amendments to the NO_X SIP Call's monitoring provisions to authorize particular forms of alternate monitoring requirements. Specifically, two commenters requested an amendment providing that, if a demonstration is made that emissions from a state's large non-EGU boilers and turbines ''will not exceed the [emissions] budget . . . established'' for such sources, then those sources would be allowed to determine reported NO_X emissions according to a methodology based on the use of emission factors—that is, factors approved as estimates of the quantity of NO_X emitted per unit of fuel combusted—and information on fuel consumption. Another commenter requested an amendment to authorize methodologies involving the use of gas concentration CEMS installed and operated in accordance with the provisions of 40 CFR part 60 in addition to the monitoring methodology preferred by the two previously mentioned commenters. Another commenter, without expressing a preference for a particular form of alternate monitoring requirements, recommended that EPA issue model rule language for alternate monitoring requirements that would be approvable in SIP revisions.

Most commenters supporting the proposed monitoring amendment did not request that EPA make further amendments to identify particular permissible alternate monitoring requirements or issue model rule language. One of these commenters specifically recommended that EPA defer to states' choices regarding alternate monitoring requirements to the maximum extent allowable.

Response: EPA disagrees with the comments seeking further amendments to identify specifically permissible alternate monitoring requirements or issue model rule language and agrees with the comments supporting the monitoring amendment as proposed without such further amendments. Upon finalization of the proposed amendment to the NO_X SIP Call regulations making the inclusion of part 75 monitoring requirements in SIPs optional rather than mandatory, states would have the flexibility to establish their own preferred forms of monitoring requirements for NO_X SIP Call purposes, subject to the existing general provisions at § 51.121(i) introductory text and (i)(1) concerning SIP monitoring requirements—provisions that EPA did not propose to amend. Under the general monitoring provisions, which closely parallel the longstanding provisions concerning SIP source surveillance requirements at 40 CFR 51.210 and 51.211, each SIP revision must provide for monitoring the status of compliance with any control measures adopted to achieve the NO_X SIP Call's emissions reduction requirements, and the monitoring must be sufficient to determine whether sources are in compliance with the control measures. Nothing in these

[28] 83 FR at 48758–61.

[29] Regulatory findings and requirements that EPA did not propose to substantively amend include (but are not limited to) the findings of good neighbor obligations with respect to the 1979 1-hour ozone NAAQS, the requirements for SIPs to contain control measures addressing these obligations, the final NO_X budgets, the requirement for enforceable limits on seasonal NO_X mass emissions for large EGUs and large non-EGU boilers and turbines where states have included control measures for these types of sources in their SIPs, the requirement for states to adopt replacement control measures into their SIPs to achieve the emissions reductions formerly projected to be achieved by the NBTP, and the general requirements for enforceability and for monitoring of the status of compliance with the control measures adopted.

general monitoring provisions precludes the commenters' preferred forms of monitoring requirements where such requirements are shown to be sufficient to meet these criteria. Thus, the further amendments suggested by the commenters are unnecessary, because where a state agrees that the commenters' preferred forms of monitoring requirements are appropriate, the state may obtain approval of those requirements simply by submitting a SIP revision that adopts those requirements and demonstrating that the revision satisfies the general monitoring provisions and does not conflict with any other applicable CAA requirement.[30] For the same reasons that EPA considers it reasonable under current circumstances to make part 75 monitoring optional rather than mandatory for NO_X SIP Call purposes (as discussed in section II.B. of this document), EPA also considers it reasonable to defer to states' choices regarding alternate monitoring requirements for NO_X SIP Call purposes to the extent consistent with the general monitoring provisions at § 51.121(i) introductory text and (i)(1).

In addition, EPA believes that inclusion of the suggested further amendments would not be particularly useful in providing certainty of the approvability of any specific state regulation implementing the commenters' preferred forms of monitoring requirements. Notwithstanding any endorsement of a particular overall monitoring approach that EPA might include in the regulations, given the need to satisfy the NO_X SIP Call's general monitoring provisions just discussed, EPA would still need to individually review the specific alternate monitoring requirements in each SIP revision to support a determination that the monitoring is sufficient to ensure compliance with the NO_X SIP Call's emissions reduction requirements. For example, EPA would need to consider whether each regulation contains adequate provisions to avoid gaps in required monitoring and whether a regulation following an emission factor approach employs emission factors that are designed to avoid any bias toward understatement of emissions. Approval of each SIP revision would also be subject to notice-and-comment procedures. While in theory EPA could provide greater certainty of the approvability of certain forms of alternate monitoring requirements by issuing model rule language, EPA believes issuance of such language in this instance is neither necessary nor consistent with EPA's general intent of deferring to states' preferences regarding alternate monitoring requirements for NO_X SIP Call purposes.

Comment: One commenter stated that amending the NO_X SIP Call regulations to allow sources that currently monitor using CEMS to switch to alternate monitoring methods would be inconsistent with CAA section 110(l), 42 U.S.C. 7410(l), known as the ''anti-backsliding'' provision, which prohibits EPA from approving any implementation plan revision that would interfere with any applicable requirement under the CAA. The commenter stated that effective and accurate emissions monitoring is needed to protect against backsliding and that allowing sources to use monitoring approaches less effective than CEMS monitoring would be inconsistent with section 110(l) because it would deprive communities and regulators of timely or reliable emissions information needed to identify possible violations of emissions standards and to facilitate enforcement actions.

Response: EPA disagrees with this comment. As a preliminary matter, EPA notes that CAA section 110(l) applies to EPA actions determining to approve implementation plan revisions, not other EPA actions that might affect the matters that are required to be addressed through such implementation plan revisions. Thus, this action to amend the NO_X SIP Call regulations is not subject to section 110(l). At the same time, no Agency-issued regulation can negate or otherwise modify the Congressionally-established prohibition in section 110(l) against approval of implementation plan revisions that would permit backsliding. For this reason, notwithstanding the content of any amendment to the NO_X SIP Call regulations finalized in this action, approval of any SIP submissions made in response to such an amendment will necessarily still be subject to anti-backsliding requirements under section 110(l).

Substantively, the proposed amendment to monitoring requirements is not inconsistent with the purpose of section 110(l) because there is no reason to expect that a SIP submission seeking only to revise monitoring requirements for NO_X SIP Call purposes would result in increased emissions or otherwise interfere with any other CAA requirement, in light of the criteria for approval of such a SIP submission. That is, the amendments proposed for this action make no changes to the NO_X SIP Call's existing regulatory requirements related to statewide emissions budgets or enforceable mass emissions limits for large EGUs and large non-EGU boilers and turbines. As discussed in response to a previous comment, under § 51.121(i) introductory text and (i)(1) any alternate monitoring requirements approved into a SIP for NO_X SIP Call purposes must be sufficient to determine whether the state's sources are in compliance with the control measures adopted to meet the Rule's emissions requirements. Given continued implementation of SIP requirements governing the unchanged amounts of allowable emissions, accompanied by replacement monitoring requirements sufficient to ensure compliance with the unchanged emissions requirements, a SIP revision adopted in response to the proposed amendments would not be expected to result in increases in emissions that could interfere with other statutory or regulatory requirements.

The commenter's suggestion that CEMS emissions data provided pursuant to NO_X SIP Call requirements is necessary to provide emissions information to identify violations of and enforce other emissions standards is outside the scope of the proposal. The NO_X SIP Call's monitoring requirements were promulgated to provide monitoring information sufficient to ensure compliance with the control measures adopted to achieve the Rule's emissions reduction requirements.[31] Monitoring requirements to ensure compliance with other emissions requirements are generally established as part of the regulations that establish each specific emissions requirement or through monitoring-focused regulations such as the source surveillance regulations at 40 CFR part 51, subpart K, or the compliance assurance monitoring regulations at 40 CFR part 64. Any concerns about the adequacy of the monitoring requirements established under other regulations would be properly raised as comments in the actions promulgating those regulations or as requests for new rulemaking, not as comments on this action addressing monitoring requirements under the NO_X SIP Call regulations. In the proposal for this action, EPA did not propose to alter any monitoring requirements under any

[30] EPA notes that for purposes of demonstrating that the replacement monitoring requirements would be sufficient to ensure compliance with the emissions requirements, a state generally would be able to cite the same types of data that EPA presented in the proposal to support the proposed amendment to the NO_X SIP Call's monitoring requirements.

[31] *See* 83 FR at 48757.

regulations other than the NO_X SIP Call regulations.

Comment: One commenter stated that amending the NO_X SIP Call regulations to allow sources that currently monitor using CEMS to switch to alternate monitoring methods would be inconsistent with CAA section 504(b), 42 U.S.C. 7661c(b), which authorizes EPA to prescribe monitoring requirements for the operating permits that certain sources are required to obtain pursuant to CAA title V. The commenter cited a portion of the provision stating that ''continuous emissions monitoring need not be required if alternative methods are available that provide sufficiently reliable and timely information for determining compliance'' and stated that because CEMS monitoring is the most reliable and timely monitoring method for determining compliance with NO_X emissions limits, it would be unreasonable and inconsistent with section 504(b) for EPA to allow sources which already have CEMS equipment installed to use less reliable and timely monitoring approaches.

Response: EPA disagrees with this comment. While CAA section 504(b) provides EPA with authority to prescribe monitoring requirements for title V operating permits, it does not require EPA to exercise that authority in any particular situation and hence does not impose any statutory requirement applicable to this action. Further, even accepting for purposes of argument the comment's premise that the conditions that would apply to an exercise of EPA's authority under section 504(b) should also apply to EPA's establishment of monitoring requirements for NO_X SIP Call purposes, the proposed monitoring amendment is neither unreasonable nor inconsistent with those conditions. As noted in the comment, section 504(b) explicitly provides that EPA need not exercise its authority under the section so as to require CEMS in circumstances where alternate monitoring methods sufficient to determine compliance are available. In the proposal, EPA presented recent emissions data and expressed the view that, given the current substantial margins by which the sets of large EGUs and large non-EGU boilers and turbines in all NO_X SIP Call states are complying with the relevant portions of the statewide emissions budgets as well as the fact that most of the relevant emissions will continue to be monitored according to part 75 under other programs, monitoring of the remaining emissions using non-part 75 approaches can now provide sufficient assurance that the Rule's required emissions reductions will continue to be achieved.[32] The commenter does not challenge EPA's assessment. EPA's rationale for proposing the amendment closely parallels and is fully consistent with the conditions set forth in section 504(b) for the possible establishment of monitoring requirements other than CEMS monitoring requirements.

Moreover, neither of the commenter's stated reasons for suggesting that it would be unreasonable or inconsistent with section 504(b) for EPA to allow the use of non-CEMS approaches is compelling. The first stated reason—that CEMS-based monitoring approaches would provide the *most* reliable and timely information for determining compliance with NO_X emission limits—is itself inconsistent with the statutory text which, as just discussed, explicitly indicates the potential acceptability of non-CEMS monitoring approaches that provide *sufficient* reliability and timeliness of information for determining compliance. The second stated reason—that the sources in question already have CEMS equipment installed—is incorrect for some of the sources potentially affected by the monitoring amendment and materially incomplete for all of them. The set of large EGUs and large non-EGU boilers and turbines subject to the NO_X SIP Call's ongoing requirements discussed in this document includes both existing and new units. Some new units that would need to install CEMS equipment if required to monitor under part 75 might not need to install some or all of that CEMS equipment if part 75 monitoring were not required for NO_X SIP Call purposes. Further, as discussed in the proposal, even for a source that already has CEMS equipment installed, the source's ongoing operating costs to monitor using the installed CEMS equipment could be higher than the source's ongoing operating costs if the source were to switch to a non-CEMS monitoring approach.[33] Besides the factor of whether non-CEMS monitoring approaches that provide sufficiently reliable and timely information for determining compliance are available, the text of section 504(b) does not specify or limit other factors that EPA may consider when applying its authority under the section. Thus, it is neither unreasonable nor inconsistent with section 504(b) for EPA to consider the likelihood that some sources would incur lower monitoring costs if allowed to use non-CEMS monitoring approaches for NO_X SIP Call purposes.

Comment: One commenter summarized several provisions of CAA section 110(a), 42 U.S.C. 7410(a), concluding with the interpretation that ''a bedrock requirement for any implementation plan is for emissions monitoring requisite to ensure attainment and maintenance of the NAAQS.'' The commenter further stated that the current network of ambient air quality monitors is ''not robust enough to adequately assess levels of [ozone and particulate matter] in ambient air'' and cited a study concerning satellite-based measurements of ambient air quality. The commenter concluded that ''[g]iven this level of under-assessment of pollution problems and dramatic[ ] undercounting of nonattainment issues,'' the proposed amendment to allow states to establish alternate emissions monitoring requirements ''is wholly inconsistent with the Clean Air Act's requirements.''

Response: EPA disagrees that the proposed amendment to the NO_X SIP Call regulations would be inconsistent with the statutory requirements under CAA section 110(a). The comment conflates the statutory provision authorizing EPA to prescribe emissions monitoring requirements for individual sources under CAA section 110(a)(2)(F) with the general requirement for ambient air quality monitoring under CAA section 110(a)(2)(B). Contrary to the commenter's interpretation of CAA section 110(a), the data used to determine whether air quality in a given area meets the ozone or $PM_{2.5}$ NAAQS are the data obtained through the ambient air quality monitoring network, not the data obtained through source emissions monitoring. Similarly, assessments of whether the emission control measures in effect are collectively sufficient to ensure attainment and maintenance of those NAAQS are made using monitored ambient air quality data or projected ambient air quality data (which necessarily reflect projected, not monitored, source emissions data). The amendments proposed for this action would not alter any regulatory requirements concerning ambient air quality monitoring, and comments on this topic are outside the scope of the proposal.

As discussed in response to a previous comment, the originally intended purpose served by the emissions monitoring requirements under the NO_X SIP Call was to ensure compliance with the control measures

[32] 83 FR at 48757–58.

[33] 83 FR at 48761. Several commenters also discussed the significance of the operating and maintenance costs that are incurred to comply with monitoring requirements. *See* comments of North Carolina, Alcoa, Citizens Energy, Council of Industrial Boiler Owners, and Virginia Manufacturers Association.

adopted to achieve the Rule's emissions reduction requirements, not to ensure attainment and maintenance of the NAAQS. Amendment of the NO_X SIP Call as proposed for this action would not alter the provisions at § 51.121(i) introductory text and (i)(1) that set forth the ongoing general requirement for SIPs to include emissions monitoring sufficient for this purpose. The amendment would simply expand the options available to states for addressing the ongoing general requirement by eliminating the additional specific requirement at § 51.121(i)(4) for part 75 monitoring by large EGUs and large non-EGU boilers and turbines. Like the NO_X SIP Call's initial monitoring requirements, the Rule's monitoring requirements as amended would be fully consistent with CAA section 110(a)(2)(F), which authorizes EPA to prescribe emissions monitoring and reporting SIP requirements that may include requirements for ''correlation of such [emissions] reports by the State agency with any emission limitations or standards'' established under the CAA.

Comment: One commenter discussed the data EPA presented in the proposal regarding recent emissions reported by the sources that would have been subject to the former NBTP. While not disputing EPA's assessment that the data show that the sources in all states subject to the NO_X SIP Call are currently complying with the assigned portions of their respective statewide budgets by substantial margins, the commenter asserted that EPA's reliance on the data to support the proposed amendment to the Rule's monitoring requirements is misguided. The commenter questioned the relevance of EPA's assessment that non-part 75 monitoring by the sources not subject to part 75 monitoring requirements under other programs could now provide assurance of continued compliance with the NO_X SIP Call's emissions reduction requirements, suggesting that EPA should instead consider emissions targets more stringent than the Rule's existing budgets.

With regard to EPA's assessment that the substantial majority of emissions from large EGUs and large non-EGU boilers and turbines would continue to be monitored according to part 75 under other programs, the commenter observed that in certain states, the emissions from the subset of large EGUs and large non-EGU boilers and turbines potentially affected by the proposed monitoring amendment can be significant relative to the emissions from the remaining large EGUs and large non-EGU boilers and turbines that must continue to monitor their emissions under part 75 for other programs. Based on this observation, the commenter concluded that, in these states, allowing the potentially affected sources to monitor using non-CEMS methodologies ''will notably degrade the overall NO_X emissions data'' from the sets of large EGUs and large non-EGU boilers and turbines in the states. The commenter also stated that the total amount of seasonal NO_X emissions from the potentially affected sources—approximately 15,000 tons in the 2017 ozone season—is ''not trivial,'' but is significant in an absolute sense regardless of its relation to the amount of emissions from the sources that would still be subject to part 75 monitoring requirements under other programs. Noting that annual emissions of 100 tons can trigger classification of certain types of new or modified sources as ''major sources'' under other CAA programs, the commenter suggested that allowing sources that collectively produce 15,000 tons of seasonal NO_X emissions to stop using CEMS is comparable to excusing as many as 360 major sources from requirements to use NO_X CEMS under other programs.

Response: EPA continues to believe that the emissions data presented in the proposal provide compelling support for the proposed amendment to the NO_X SIP Call's emissions monitoring requirements. EPA disagrees with the commenter's suggestion that in evaluating possible changes to monitoring requirements under the NO_X SIP Call, rather than assessing whether alternate forms of monitoring would be sufficient to ensure compliance with the Rule's existing emissions reduction requirements, EPA should instead consider whether the alternate monitoring requirements would be sufficient to ensure compliance with more stringent emissions targets. As discussed in response to a previous comment, the Rule's monitoring requirements were established to provide monitoring information sufficient to ensure compliance with the control measures adopted to achieve the Rule's required emissions reductions, and monitoring requirements to ensure compliance with other emissions requirements are established in other regulations. Comments concerning whether the Rule's existing emissions reductions requirements are sufficiently stringent are outside the scope of the proposal. EPA did not propose to substantively alter any regulatory requirements other than the NO_X SIP Call's monitoring requirements.

With regard to the commenter's observations concerning the relative magnitudes of the respective total amounts of emissions from sources potentially affected by the proposed monitoring amendment and other sources in certain states, EPA acknowledges that emissions from the potentially affected sources comprise larger shares of the total emissions from large EGUs and large non-EGU boilers and turbines in some states than others but disagrees with the suggestion that this fact should foreclose the possibility of allowing monitoring flexibility for NO_X SIP Call purposes. According to the recent emissions data presented in the proposal [34] and reproduced in Table 1 in section II.B. of this document, for six of the states identified in the comment—Alabama, Maryland, New Jersey, New York, South Carolina, and Tennessee—the total amount of emissions from the state's potentially affected sources was from 19% to 30% of the total amount of emissions from the state's remaining large EGUs and large non-EGU boilers and turbines, and for the last identified state—Delaware—the emissions from the state's potentially affected sources exceeded the emissions from the state's remaining large EGUs and large non-EGU boilers and turbines. However, even accepting the commenter's premise that allowing the potentially affected sources in these states to switch from CEMS methodologies to non-CEMS methodologies would reduce the accuracy of the total reported amounts of emissions from large EGUs and large non-EGU boilers and turbines, EPA believes that the compliance margins in these states are large enough that there would still be sufficient assurance that the NO_X SIP Call's emissions reduction requirements would continue to be achieved. In each of these states (as well as all the other states subject to the NO_X SIP Call), the emissions data in Table 1 indicate that, assuming no increase in the total emissions from the sources in the state that would continue to be subject to part 75 monitoring under other programs, the total emissions from the state's potentially affected sources could increase at least eightfold without causing the total emissions from the state's large EGUs and large non-EGU boilers and turbines to exceed the relevant portion of the statewide emissions budget.[35] Thus, again

[34] *See* 83 FR at 48758 (Table 1).

[35] The recent compliance margins for the individual NO_X SIP Call states indicated by the data in Table 1 range from 8.6 times to over 300 times the total reported emissions from the respective states' sets of potentially affected sources. For example, for Alabama, the data in Table 1 indicate a compliance margin of 16,420 tons (25,497 − 9,077 = 16,420), which is 8.6 times the reported emissions

Continued

assuming no increase in the total emissions from the sources in the state that would continue to be subject to part 75 monitoring under other programs, even if the total reported emissions data for the set of potentially affected sources in a state in some future ozone season were to understate the true emissions data because of less accurate measurements made using non-CEMS methodologies, in order for the total reported emissions data to incorrectly indicate compliance for the state when the true emissions data would indicate non-compliance, the cumulative measurement errors causing understatement of the true data—that is, the differences between the reported emissions data values and the true emissions data values for each source—would have to be several times larger than the reported data values.[36] The commenter does not suggest, and EPA does not believe, that the accuracy of non-CEMS monitoring approaches would be so poor as to allow such a scenario to occur. Moreover, if the commenter believes that the specific alternate monitoring approaches included in a particular state's SIP revision submitted for EPA's approval would provide insufficiently accurate data to ensure continued compliance with the control measures adopted in the state's SIP for NO_X SIP Call purposes, the notice-and-comment process for approval of the SIP revision would provide an opportunity for the commenter to raise that concern.

With regard to the commenter's observations concerning the significance of the total seasonal NO_X emissions from the potentially affected sources in an absolute sense, EPA agrees that a 15,000-ton quantity of seasonal NO_X emissions is ''not [a] trivial'' amount but disagrees with the suggestion that this fact should foreclose the possibility of allowing monitoring flexibility for NO_X SIP Call purposes. The proposed amendments would not alter any of the Rule's regulatory requirements concerning permissible amounts of emissions and would not eliminate the requirement for SIPs to provide for monitoring of the emissions from all large EGUs and large non-EGU boilers and turbines sufficient to ensure continued compliance with the Rule's emissions reduction requirements. Nor does EPA agree that allowing non-CEMS monitoring approaches to be used for purposes of demonstrating compliance with control measures adopted under the NO_X SIP Call is comparable to excusing major sources from requirements to monitor using CEMS for other purposes. The amendments proposed for this action are based on EPA's assessment, specific to this action, that under current circumstances monitoring information from some sources other than part 75 monitoring information can now provide sufficient assurance that the NO_X SIP Call's required emissions reductions will continue to be achieved. Where any source is required to monitor using CEMS for another purpose under regulations other than the NO_X SIP Call regulations, the amendments proposed for this action would not affect those requirements.

Comment: One commenter contended that allowing alternate monitoring requirements will lead to increased emissions. The commenter observed that EPA did not know which specific sources might ultimately be allowed to use alternate monitoring methods. According to the commenter, EPA had suggested in the proposal that the potential for increases in pollution resulting from alternate monitoring requirements is merely uncertain, because EPA would not itself relax the requirements but would leave that decision to the states, and the commenter stated it is arbitrary and capricious for EPA to rely on such a claim of uncertainty to avoid assessing the impacts of increased pollution. The commenter contended that EPA had suggested in the proposal that ''systemwide NO_X emissions are low enough that if there are increases in pollution attainment and maintenance [of the NAAQS] might not be threatened.'' The commenter also discussed ozone pollution and the harms it causes to human health and the environment, citing several EPA documents.

Response: EPA does not dispute the commenter's summary of the harms caused by ozone pollution or the correct observation that EPA does not know which specific sources might ultimately be allowed to use alternate monitoring methods (because states, not EPA, will decide whether to revise their SIPs). Otherwise, EPA disagrees with these comments. Relative to part 75 monitoring approaches, non-part 75 monitoring approaches may be expected to provide less detailed monitoring data and require less rigorous quality assurance, with a consequently greater possibility that the total NO_X emissions amount reported by a source for a given ozone season might understate or overstate the source's actual total emissions for that ozone season to some degree. However, there is no reason to expect any approved non-part 75 monitoring methodology either to be systematically biased toward understatement of emissions or to create any incentive leading to increased emissions. EPA was clear in the proposal that no changes to emissions or air quality are expected because no changes are being made to the NO_X SIP Call's emissions requirements.[37] The commenter effectively equates allowing alternate monitoring methods with relaxing emissions requirements, providing no rationale or evidence to support the contention that in the absence of any change in either emissions requirements or the general requirement to monitor emissions, possible changes in just the allowed methods for emissions monitoring under the NO_X SIP Call will lead to increased emissions. EPA continues to believe it is reasonable to assume that under current circumstances where sources are already complying with the NO_X SIP Call's emissions requirements by substantial margins, substitution of one monitoring method for another monitoring method, in the absence of any change in the Rule's emissions requirements, will not cause sources to change their behavior in a way that would affect emissions levels. Moreover, in the event that a particular state's SIP submission were to include a poorly designed alternate monitoring requirement that could lead to systematic understatement of emissions, the SIP approval process—including notice-and-comment procedures—would provide a further safeguard against the possibility of alternate monitoring requirements insufficient to ensure compliance with the Rule's emissions requirements. The commenter appears to incorrectly assume that the amendment in this action would by itself end all EPA oversight of monitoring requirements for NO_X SIP Call purposes and fails to acknowledge the additional safeguard afforded by the SIP approval process.

The commenter's claims regarding suggestions that EPA purportedly made about the supposed possibility of increased emissions misrepresent the proposal. Contrary to the comments, nowhere in the proposal did EPA indicate ''uncertainty'' as to whether the proposed amendments would lead to

from the state's potentially affected sources (16,420 ÷ 1,911 = 8.6).

[36] For illustrative purposes, this example assumes both that the collective emissions from potentially affected sources in a state would increase by the amount necessary to cause non-compliance for the state and that the alternate monitoring methodologies would fail to register the increase in emissions. EPA does not believe these assumptions have a reasonable basis and is using them only to respond to the commenter's concerns regarding accuracy.

[37] 83 FR at 48761.

increased pollution. Rather, as just discussed, EPA explicitly stated that the proposed amendments are expected to have no impact on emissions or air quality. The fact that states, rather than EPA, will decide whether to revise their SIPs to establish alternate monitoring requirements was cited in the proposal as a basis for uncertainty with regard to the potential amount of reductions in monitoring costs, not as a basis for uncertainty with regard to supposed potential increases in emissions.[38] Likewise, nowhere in the proposal did EPA make any suggestion regarding the relationship of supposed potential increases in emissions to the likelihood of attainment or maintenance of any NAAQS. Rather, as an illustration of the magnitude of states' recent margins of compliance with the NO_X SIP Call's emissions reduction requirements, EPA stated only that such compliance would continue to be achieved even if emissions were to increase substantially from current levels, and then proceeded to explain why such increases in emissions in fact are unlikely to occur.[39]

Comment: One commenter suggested that the proposal did not address relevant differences among the states and source types that could be affected by the proposed monitoring amendment. The commenter stated that the proposal failed to identify which sources affected under the NO_X SIP Call do not participate in any CSAPR trading program. Noting that several NO_X SIP Call states are outside the region covered by the various CSAPR trading programs, the commenter asserted that EPA had failed to explain ''why sources in some areas should be allowed to monitor less and pollute more,'' and that ''EPA is thus effectively proposing to end continuous NO_X monitoring for an entire geographic area without discussing the ensuing implications.'' Noting that the NO_X SIP Call applies to both EGUs and non-EGUs while the CSAPR trading programs generally apply only to EGUs, the commenter further asserted that EPA did not ''coherently address the distinction between the *types* of sources'' (emphasis in original) covered by the NO_X SIP Call and the CSAPR trading programs. Repeating the contention that allowing alternate monitoring methods will lead to increased emissions, the commenter suggested that EPA should have evaluated the impacts on regional ozone transport problems of allowing alternate monitoring methods for some states and source types but not others.

Response: EPA disagrees with these comments. Contrary to the commenter's suggestion, the proposal explicitly discussed differences among NO_X SIP Call states concerning whether each state's EGUs are covered by a CSAPR trading program, noting that EGUs in Connecticut, Delaware, Massachusetts, Rhode Island, and the District of Columbia do not participate in any CSAPR trading programs.[40] Likewise, the commenter's assertion that the proposed monitoring amendment would ''end continuous NO_X monitoring for an entire geographic region'' is directly contradicted by information in the proposal: First, by the explanation that most of the EGUs in the five non-CSAPR states will remain subject to part 75 monitoring requirements under the Acid Rain Program;[41] second, by the explanation that most of the emissions from the set of large EGUs and large non-EGU boilers and turbines affected under the NO_X SIP Call come from large EGUs that would continue to monitor their emissions according to part 75 under either the Acid Rain Program or a CSAPR trading program;[42] and third, by the data showing quantitatively that out of the total set of sources subject to the NO_X SIP Call in the five non-CSAPR states, the subset of sources that would continue to be subject to part 75 monitoring requirements under other programs has produced most of the recent emissions.[43]

Contrary to the commenter's assertion that the proposal failed to address the distinction between EGUs and non-EGUs, the proposal explicitly discussed the fact that unlike most EGUs, most non-EGUs affected under the NO_X SIP Call do not participate in a CSAPR trading program or face part 75 monitoring requirements under other programs.[44] The proposal also explicitly noted that although some of the sources potentially affected by the proposed monitoring amendment are large EGUs not subject to the Acid Rain Program or a CSAPR trading program, most of the potentially affected sources are large non-EGU boilers and turbines.[45] The proposal presented recent state-specific emissions data broken out according to whether the emissions came from sources that would continue to be subject to part 75 requirements under other programs or instead came from sources potentially affected by the proposed amendment.[46] The proposal did not further break out the total recent emissions from potentially affected sources into the respective portions from EGUs and non-EGUs because EPA did not see any relevance in whether the NO_X emissions that might be monitored for NO_X SIP Call purposes using methods other than part 75 come from EGUs or from non-EGUs. The commenter has not suggested any reasons why further subcategorization of the emissions information provided in the proposal might be relevant to an evaluation of the proposed monitoring amendment. Nevertheless, to address the comment, EPA notes that large non-EGU boilers and turbines were collectively responsible for 14,860 tons of the total 15,084 tons of seasonal NO_X emissions shown in Table 1 for all units potentially affected by the proposed monitoring amendment, or 98.5% of the total, while large EGUs not required to monitor according to part 75 under the Acid Rain Program or a CSAPR trading program were collectively responsible for 224 tons, or 1.5% of the total.[47]

The comments suggesting that EPA should have evaluated the impacts on regional ozone transport problems of allowing alternate monitoring methods for some states and source types but not others reflect the commenter's unsupported assumption that allowing alternate monitoring methods is equivalent to relaxing emissions requirements. EPA has already rebutted the commenter's assumption in response to a previous comment. Because there is no reason to expect any increase in emissions from the proposed monitoring amendment, there is no reason to evaluate any impacts on regional ozone transport problems of any supposed potential increase in emissions.

Comment: One commenter stated that EPA has not ''identif[ied] any *need* to weaken emission monitoring requirements'' (emphasis in original), has not identified specific complaints

[38] 83 FR at 48761.

[39] 83 FR at 48757 & nn.38–39.

[40] 83 FR at 48756 & nn.26–27. EPA notes that there are currently no large EGUs in the District of Columbia.

[41] 83 FR at 48756 & n.27.

[42] 83 FR at 48758 & n.40.

[43] *See* 83 FR at 48758 (Table 1) (also reproduced as Table 1 in section II.B. of this document). The sum of the emissions shown in Table 1 for the sources that would continue to be subject to part 75 monitoring in the five non-CSAPR states is 1,631 tons. The sum of the emissions shown for the sources potentially affected by the proposed amendment in these states is 654 tons.

[44] 83 FR at 48751–52, 48755–56 & n.23.

[45] 83 FR at 48752.

[46] 83 FR at 48758 (Table 1).

[47] The potentially affected large EGUs are combustion turbines located in non-CSAPR states that serve generators larger than 25 MW and are exempt from the Acid Rain Program because they commenced commercial operation before November 15, 1990, and meet the definition of a ''simple combustion turbine'' in 40 CFR 72.2. There are currently 31 such units, all located in Connecticut, Delaware, or Massachusetts. The individual units are identified in the spreadsheet referenced in note 54 *infra,* available in the docket for this action.

from sources regarding the costs of operating monitoring equipment that has already been installed, and has not sufficiently discussed possible monitoring methodologies or compared their costs. The commenter also stated that allowing alternate monitoring requirements would unfairly advantage new sources over existing sources because the new sources, unlike existing sources, would be allowed ''to both use cheaper, less effective monitoring systems and to get away with emitting more NO_X'' than existing sources.

Response: EPA disagrees with these comments. In the proposal, EPA discussed the opportunity to reduce monitoring costs under the NO_X SIP Call for some sources while continuing to ensure compliance with the Rule's emissions reduction requirements.[48] By definition, a regulatory initiative that reduces overall costs while holding overall benefits constant produces positive net benefits. The commenter has not offered any legal basis or policy rationale supporting the notion that EPA should decline to pursue a regulatory initiative intended to produce positive net benefits simply because the net benefits happen to take the form of a reduction in sources' monitoring costs.

The commenter's suggestion that EPA has presented insufficient evidence to support the existence of monitoring cost reduction opportunities is belied by the information in the proposal, which described the various monitoring methodologies available under part 75 and qualitatively discussed the cost reductions that could be available if the sources using each of those methodologies were to switch to alternate monitoring methodologies.[49] Moreover, all of the comments received on the proposal from source owners and industry associations, as well as most of the comments received from states, agreed that the proposed amendment would make monitoring cost reductions possible for sources in states that choose to revise their SIPs.[50] The commenter asserted that sources had no reason to complain of monitoring costs because they had already installed the necessary CEMS equipment, but as EPA explained in response to a previous comment, this assessment is incorrect as to new sources, because new sources would not yet have installed the CEMS equipment, and materially incomplete as to all sources, because CEMS-related costs include not only equipment installation costs but also ongoing operating costs. EPA sees no reason why, in the absence of any contrary information, more evidence is needed to demonstrate the existence of opportunities for monitoring cost reductions than was already presented in the proposal, as further supported by comments.

With respect to quantification of the potential reductions in monitoring costs, EPA explained in the proposal that because states, not EPA, would decide whether to revise the monitoring requirements in their SIPs and because EPA lacked complete information on the remaining monitoring requirements that the sources would face, it was not possible to predict the amount of monitoring cost reductions that could occur following finalization of the proposed monitoring amendment.[51] EPA still lacks information on the remaining monitoring requirements that sources will face but received comments indicating some likelihood that at least six states would revise their SIPs following finalization of the proposed monitoring amendment. The states' comments make it possible to estimate a potential range of monitoring cost reductions that could occur if these states were to adopt some of the changes in monitoring requirements that EPA considers most likely. EPA's estimates are provided in section V of this document.

Finally, the commenter's suggestion that the proposed monitoring amendment would unfairly advantage new sources over existing sources lacks any support. The NO_X SIP Call's current requirements for part 75 monitoring apply to both existing and new sources, and upon finalization of the proposed monitoring amendment, states' flexibility to establish alternate monitoring requirements will likewise apply to both existing and new sources. Commenters have not suggested any reason to believe that states will choose to exercise this new flexibility in a manner that discriminates among their existing and new sources in terms of the prospective monitoring requirements established in their SIPs, and if the commenter is suggesting that EPA should require new sources to incur certain capital expenditures in the future simply because existing sources incurred those same capital expenditures in the past, EPA disagrees. Further, the commenter's assertion that the monitoring amendment will allow new sources to ''get away with emitting more NO_X'' again rests on the commenter's unsupported assumption that allowing alternate monitoring methods is equivalent to relaxing emissions requirements. EPA has already rebutted the commenter's assumption in response to a previous comment. EPA also reiterates that the proposed monitoring amendment would not change any other emissions or monitoring requirements applicable to either existing or new sources under regulations other than the NO_X SIP Call, including requirements that may be more stringent for new sources than existing sources.

Comment: One commenter discussed the superiority of CEMS methodologies compared to non-CEMS monitoring methodologies in terms of the timeliness and reliability or accuracy of the emissions data collected, particularly with respect to NO_X emissions, and cited various EPA documents in support. The commenter stated that EPA ''should be enhancing the use of CEMS in emissions measurements'' instead of allowing monitoring flexibility. In particular, the commenter stated that the continued use of CEMS is necessary to ensure compliance with the Chesapeake Bay Total Maximum Daily Load (TMDL) for nitrogen established under the Clean Water Act. In support of this comment, the commenter summarized the role of atmospheric deposition as a contributor of nitrogen to Chesapeake Bay, citing studies by EPA and others. The commenter also noted that the plan for achieving the TMDL includes commitments from EPA to reduce atmospheric deposition through implementation of rules addressing CAA requirements, including the NO_X SIP Call, and stated that EPA must maintain or strengthen air regulations in order to meet its commitments. The commenter stated that without accurate monitoring, states and EPA ''will not know whether the reductions necessary to attain the Bay TMDL goals by 2025 are actually being met.''

Response: EPA agrees that CEMS methodologies are often the preferred monitoring approaches for ensuring compliance with particular emissions requirements but disagrees that the acknowledged superiority of CEMS methodologies for some purposes should foreclose the possibility of allowing monitoring flexibility for NO_X SIP Call purposes where other monitoring methods would be sufficient to ensure continued achievement of the Rule's emissions reduction requirements. Likewise, EPA does not dispute the commenter's summary regarding the Chesapeake Bay TMDL

[48] 83 FR at 48761–62.

[49] 83 FR at 48761 & nn.53–54.

[50] *See* comments from Indiana, Michigan, North Carolina, Ohio, South Carolina, Alcoa, Citizens Energy, Council of Industrial Boiler Owners, Illinois Environmental Regulatory Group, Ohio Manufacturers Association, Virginia Manufacturers Association, and West Virginia Manufacturers Association, available in the docket for this action.

[51] 83 FR at 48761.

and EPA's reliance on the NO_X SIP Call's emissions reductions to reduce atmospheric deposition contributing nitrogen to the Bay but disagrees that those facts suggest that compliance with the Rule's emissions reduction requirements must be determined using any particular monitoring approach. As discussed in response to a previous comment, the NO_X SIP Call's existing monitoring requirements were established to provide monitoring information sufficient to ensure compliance with the control measures adopted to achieve the Rule's required emissions reductions, and monitoring requirements to ensure compliance with other emissions requirements are established in other regulations. Comments concerning whether the NO_X SIP Call's existing emissions reductions requirements are sufficiently stringent to address other environmental objectives, including achievement of the Chesapeake Bay TMDL, are outside the scope of the proposal. EPA did not propose to substantively alter any regulatory requirements other than the NO_X SIP Call's monitoring requirements.

Comment: One commenter supported a narrower amendment to the NO_X SIP Call's monitoring requirements than EPA proposed. Specifically, the commenter supported an amendment that would allow states to eliminate the requirements for reporting emissions data to EPA under part 75 but would not allow the use of substantively different monitoring methodologies for collecting emissions data. The commenter objected to allowing sources that currently monitor emissions using CEMS to use other monitoring methodologies because, unlike CEMS methodologies, non-CEMS methodologies do not allow for accurate and timely determinations of compliance with or violations of short-term emission limits. The commenter also expressed the expectation that if the proposed amendment to emissions monitoring requirements is finalized, some states would be required to revise their SIPs to establish less stringent monitoring requirements because of provisions in state law barring the states from imposing requirements on sources that exceed minimum Federal requirements.

Response: The comment expressing concern that non-CEMS methodologies are less useful than CEMS methodologies for determining compliance with emissions requirements other than the NO_X SIP Call's emissions requirements is outside the scope of the proposal. As discussed in response to a previous comment, the NO_X SIP Call's existing monitoring requirements were established to provide monitoring information sufficient to ensure compliance with the control measures adopted to achieve the Rule's required emissions reductions, and monitoring requirements to ensure compliance with other emissions requirements are established in other regulations. The NO_X SIP Call does not require states to impose short-term emissions limits on their sources, and EPA did not propose to substantively alter any regulatory requirements other than the NO_X SIP Call's monitoring requirements.

The comment suggesting that some NO_X SIP Call states would be required under state law to revise their SIPs if the proposed monitoring amendment is finalized has no bearing on this action. EPA's proper focus in this action is whether the proposed amendment to allow alternate monitoring requirements in SIPs is appropriate under the CAA. Questions of whether and how state law provisions might affect the decisions of individual states to adopt alternate monitoring requirements allowed under the amendment are outside EPA's purview.

Comment: One commenter stated that allowing sources that currently monitor emissions for NO_X SIP Call purposes with CEMS methodologies to instead monitor their emissions with non-CEMS methodologies would result in a loss of data resolution that would make it more difficult to understand the impacts of the sources' emissions on air quality in other states. The commenter stated that, with less detailed emissions data, it would be more difficult for states to work together to develop regionally consistent approaches for addressing good neighbor obligations with respect to the 2015 ozone NAAQS. The commenter also requested that EPA identify the specific units whose monitoring requirements could potentially be altered by states if the proposed monitoring amendment is finalized, as well as the locations of the units.

Response: EPA disagrees that allowing the use of alternate monitoring requirements for NO_X SIP Call purposes would materially impact the ability of states to work together to address their good neighbor obligations with respect to the 2015 ozone NAAQS in a regionally consistent manner. As discussed in section II.B. of this document, if the proposed amendment is finalized, over 90% of the emissions from the set of NO_X SIP Call large EGUs and large non-EGU boilers and turbines would still be monitored according to part 75 under other regulations if the relative proportions shown for 2017 in Table 1 continue into the future. In addition, the potentially affected sources in states that choose to revise their SIPs would still need to provide emissions monitoring information for each ozone season sufficient for the state to demonstrate compliance with the Rule's emissions reduction requirements. The commenter has not explained the purpose for which the enhanced data resolution provided by part 75 monitoring is desired. In any event, EPA notes that projected hourly emissions data for use in air quality modeling could be prepared based on the intra-year time patterns in the extensive historical emissions data reported by the sources for periods while the sources have been subject to part 75, because those data would remain available even if hourly emissions data are no longer reported in the future for some of these sources. As indicated in Table 1, the total amount of recent seasonal NO_X emissions from the units that could potentially switch from part 75 monitoring approaches to non-part 75 monitoring approaches was approximately 15,000 tons during the 5-month ozone season, which by extrapolation suggests possible annual emissions of roughly 36,000 tons. By comparison, the most recent National Emissions Inventory (for 2014) indicates that for the set of NO_X SIP Call states, the total amount of annual NO_X emissions from all types of stationary sources—that is, not just the large EGUs and large non-EGU boilers and turbines currently subject to part 75 monitoring requirements under the NO_X SIP Call—was over 2,000,000 tons, and the total amount of annual NO_X emissions from all stationary and mobile sources was over 5,000,000 tons.[52] Thus, the NO_X SIP Call units potentially affected by the proposed amendment appear to be responsible for roughly 2% of the total stationary source emissions and less than 1% of the total stationary and mobile source emissions from NO_X SIP Call states. Given the small percentages of the relevant overall emissions inventory represented by the large non-

[52] *See* state_tier1_caps.xlsx, available at *https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data* (follow the link for State Average Annual Emissions Trend) and in the docket for this action. The total amount of stationary and mobile source emissions can be obtained from the spreadsheet by filtering column B to exclude all states except the 21 NO_X SIP Call jurisdictions, filtering column D to exclude ''prescribed fires'' and ''wildfires,'' filtering column E to exclude all pollutants except NO_X, and then summing the 2014 emissions inventory amounts in column Y for all remaining line items shown. The total amount of stationary source emissions can be obtained in the same way after further filtering column D to exclude ''highway vehicles'' and ''off-highway.''

EGU boilers and turbines potentially affected by the monitoring amendment proposed for this action, EPA expects that air quality modeling results and analyses of interstate ozone transport would not be materially affected by differences in the intra-year patterns of the projected hourly emissions data for these sources.

With respect to the commenter's request for the identities and locations of units potentially affected by the proposed monitoring amendment—in other words, large non-EGU boilers and turbines as well as large EGUs that are subject to the NO_X SIP Call but not the Acid Rain Program or a CSAPR trading program—EPA notes that the requested information is already publicly available in the database of reported part 75 emissions data accessible through the Agency's website.[53] The database identifies each individual unit that has reported according to part 75 and provides the unit's state, county, latitude, and longitude. The database also indicates the regulatory programs for which the data have been reported, using the code ''SIPNO_X'' to indicate where a unit has reported seasonal NO_X mass emissions data for purposes of the NO_X SIP Call but not for purposes of the seasonal NO_X trading programs established under CAIR, the original CSAPR, and the CSAPR Update. For the convenience of the commenter and others who might be similarly interested, EPA has extracted this information from the database into a spreadsheet which has been added to the docket for this action.[54]

B. Emissions Reduction Requirements

Comment: One commenter stated it had no objection to the proposed revisions to the provisions expressing the NO_X SIP Call's emissions reduction requirements to the extent that the revisions do not substantively adjust the states' budgets.

Response: EPA thanks the commenter for this comment.

Comment: One commenter agreed with EPA's objective of clarifying and simplifying the provisions describing the NO_X SIP Call's emissions reduction requirements but offered suggestions for doing so in ways that differed in some respects from the proposed amendments. First, the commenter suggested replacing the terms ''budget'' and ''NO_X budget'' with a single term such as ''NO_X ozone season budget'' both for consistency and to clarify that the budgets apply to seasonal rather than annual emissions. The commenter also suggested that EPA specify that the final budgets apply starting in 2007 and define the term ''ozone season'' in the regulations. Finally, the commenter suggested that all references to the Phase I budgets could be removed from the regulations because these budgets no longer have any substantive effect.

Response: EPA agrees with most of the commenter's suggestions. In particular, EPA agrees that the regulations would be clarified by consistently using the term ''NO_X ozone season budget'' throughout § 202F;51.121, specifying that the final budgets apply starting in 2007, and documenting the definition used for the term ''ozone season.'' Extending the commenter's suggestions, EPA believes the regulations would be further clarified by indicating that other emissions amounts described in the regulations are also ozone season emissions and documenting the definition used for the term ''nitrogen oxides'' or ''NO_X.'' The specific changes from proposal that are being adopted in response to the commenter's suggestion are described in section IV of this document.

Although EPA agrees with the commenter's observation that the Phase I budgets no longer have any substantive regulatory effect, EPA disagrees with the suggestion to remove all references to these budgets from the regulations. All but one of the states subject to the NO_X SIP Call as implemented was required to adopt a SIP revision designed to comply with a Phase I budget, and some of the control measures adopted in those SIP revisions (such as measures to reduce emissions from cement kilns or stationary internal combustion engines) continue to be implemented as approved SIP provisions. While these control measures now address requirements to comply with the final budgets rather than the Phase I budgets, EPA considers it reasonable to retain the Phase I budgets in the regulations (and to specify their years of applicability) to document and facilitate understanding of both the state regulatory actions that originally adopted the measures and the EPA actions that approved the measures into the SIPs.

C. Baseline Emissions Inventory Table

Comment: One commenter objected to the proposed removal of the baseline emissions inventory table in § 51.121(g)(2)(ii), requesting that the table be retained (with any necessary updates) for use in implementing the provisions at § 51.121(f)(2) that require enforceable limits on seasonal NO_X mass emissions from large EGUs and large non-EGU boilers and turbines. The text of § 51.121(f)(2)(ii), which EPA has not proposed to substantively amend, contains the phrase ''the total NO_X emissions projected for such sources by the State pursuant to paragraph (g) of this section.'' The commenter interprets this phrase as referring to amounts of emissions that the commenter believes either are or should be shown in the baseline emissions inventory table in § 51.121(g)(2)(ii).

Response: EPA disagrees with this comment, which appears to arise from a misinterpretation of the reference to ''paragraph (g)'' in § 51.121(f)(2)(ii). The various subparagraphs of § 51.121(g) describe or implicate two different types of projected 2007 emissions amounts. The first type is the baseline *pre-control emissions amounts projected by EPA* to represent emissions absent the reductions required by the NO_X SIP Call. The second type is the *post-control emissions amounts projected by states* to represent emissions following implementation of the control measures adopted in their SIPs. The table in § 51.121(g)(2)(ii) that EPA proposed to delete was intended to contain [55] the first type of emissions amount—specifically, the pre-control emissions amounts projected by EPA for all sources [56] in all sectors. In contrast, the phrase ''the total NO_X emissions projected for such sources [57] by the State pursuant to paragraph (g) of this section'' in § 51.121(f)(2)(ii) refers to the second type of emissions amount—specifically, the post-control emissions amounts projected by states for their

[53] *See https://ampd.epa.gov/ampd.*

[54] *See* Existing Units Potentially Affected by the NO_X SIP Call Monitoring Amendment (December 2018), available in the docket for this action. EPA acknowledges that the database does not differentiate between two sets of units for which the SIPNO_X code is used: (1) Large EGUs and large non-EGU boilers and turbines that are described in § 51.121(i)(4) and are potentially affected by the amendments in this action, and (2) other units that are not described in § 51.121(i)(4) and therefore are not affected by the amendments in this action, but that nevertheless monitor according to part 75 for NO_X SIP Call purposes pursuant to requirements in their states' SIPs. The spreadsheet in the docket includes only units in the first set.

[55] As noted in the proposal, because of an error setting out the regulatory text for certain NO_X SIP Call amendments finalized in 2000, the current table incorrectly shows the potential *post-control* emissions amounts that EPA projected for use in setting the states' amended statewide emissions budgets rather than the amended *pre-control* emissions amounts as intended. *See* 83 FR at 48760 & n.48.

[56] The ''EGU'' and ''non-EGU'' columns of the table in § 51.121(g)(2)(ii)—both the original version showing EPA's projections of pre-control emissions and the incorrectly amended version showing EPA's projections of post-control emissions—include emissions amounts for *all* EGU and non-EGU point sources, not just large EGUs and large non-EGU boilers and turbines.

[57] The term ''such sources'' in § 51.121(f)(2)(ii) refers to the large EGUs and large non-EGU boilers and turbines identified in § 51.121(f)(2).

large EGUs and large non-EGU boilers and turbines pursuant to § 51.121(g)(2)(iii) and used in the demonstrations required under § 51.121(g)(1). The fact that the phrase in § 51.121(f)(2)(ii) refers to the second type of emissions amount is evident for two reasons: first, the relevant amounts are projected ''by the State'' and not by EPA, and second, the purpose of § 51.121(f)(2)(ii) is to require enforceable mechanisms to ensure achievement of post-control emissions levels rather than pre-control emissions levels. Thus, the commenter's objection to the removal of the baseline emissions inventory table in § 51.121(g)(2)(ii) is misplaced.

D. Post-NBTP Transition Requirements

Comment: Without expressing any objection to the proposed clarifying amendments to the post-NBTP transition provision at § 51.121(r)(2), one commenter requested confirmation that EPA does not intend the requirements of the provision as revised to apply with regard to EGUs that participate in the CSAPR Update trading program under the regulations set forth at 40 CFR part 97, subpart EEEEE,[58] pursuant to an approved SIP revision.

Response: The proposed clarifying revisions to the NO_X SIP Call post-NBTP transition provision at § 51.121(r)(2) add a cross-reference to 40 CFR 52.38(b)(10)(ii), which is an existing provision of the CSAPR regulations governing SIP approvals. Under this provision of the CSAPR regulations, where a state has an approved full CSAPR SIP revision requiring certain units in the state to participate in a state seasonal NO_X trading program integrated with the Federal CSAPR Update seasonal NO_X trading program established under 40 CFR part 97, subpart EEEEE, the NO_X SIP Call's post-NBTP transition requirements under § 51.121(r)(2) are satisfied with regard to any of the state's large EGUs or large non-EGU boilers and turbines participating in that state trading program. As explained in the proposal,[59] the addition of the cross reference in § 51.121(r)(2) is not a substantive change because the approval of a full CSAPR SIP would produce this result even without a cross-reference, but the cross-reference clarifies the NO_X SIP Call regulations.

Comment: Without expressing any objection to the proposed clarifying amendments to the post-NBTP transition provision at § 51.121(r)(2), one commenter requested that EPA further clarify the Rule's post-NBTP transition requirements by adding a new regulatory provision indicating that where a state does not require its large non-EGU boilers and turbines to participate in the CSAPR Update trading program, the state must impose a cap on these units' collective seasonal NO_X mass emissions equivalent to the portion of the statewide emissions budget assigned to the units under the NBTP. The commenter requested that EPA add the new provision to § 51.121(f)(2), the provision establishing the requirement for enforceable limits on seasonal NO_X mass emissions from large EGUs and large non-EGU boilers and turbines.

Response: This comment is outside the scope of the proposal. A requirement for a cap on the collective NO_X mass emissions of each state's large non-EGU boilers and turbines does not appear in the existing regulatory text at § 51.121 because, as discussed in the proposal and summarized in section II.A. of this document, the NO_X SIP Call did not require states to control any specific types of sources or to adopt any specific types of control measures. Even where states chose to adopt control measures for large EGUs and large non-EGU boilers and turbines, thereby triggering requirements for enforceable limits on seasonal NO_X mass emissions from those sources, the regulations provided several permissible alternative forms for such limits.[60] Similarly, the post-NBTP provision at § 51.121(r)(2) does not prescribe what types of sources states must control to satisfy the post-NBTP transition requirements or what types of control measures states must employ, but simply requires each state with units affected under the NO_X SIP Call that do not participate in a successor trading program to the NBTP to ''revise the SIP to adopt control measures that satisfy the same portion of the State's emission reduction requirements under [§ 51.121] as the State projected [the NBTP] would satisfy.'' The commenter's requested amendment would codify as a Federal requirement what may be the simplest way to satisfy the Rule's post-NBTP transition requirements, but it would also reduce states' flexibility by eliminating options to satisfy the post-NBTP transition requirements in other ways, and the reduction in flexibility would represent a substantive change to the existing regulations. EPA did not propose substantive changes to the post-NBTP transition provision and made clear that the only provision of the NO_X SIP Call regulations being reopened for substantive comment was the provision concerning part 75 monitoring requirements for large EGUs and large non-EGU boilers and turbines.

Comment: Without expressing any objection to the proposed clarifying amendments to the post-NBTP transition provision at § 51.121(r)(2), two commenters requested that EPA identify in the regulations the portion of each state's statewide emissions budget assigned to the state's large non-EGU boilers and turbines by adding this information either as a new table or as an additional column in the table of statewide budgets in § 51.121(e)(2)(i). The commenters suggested that inclusion of these amounts in the regulations could help states address their post-NBTP transition requirements. One of the commenters accompanied this comment with a request that EPA confirm ''it is the EPA's intent that all required SIP elements for the NO_X SIP Call are contained under § 51.121.''

Response: These comments are outside the scope of the proposal. The portions of the statewide emissions budgets assigned to various categories of sources do not appear in the existing regulatory text at § 51.121 because, as discussed in the proposal and summarized in section II.A. of this document, the NO_X SIP Call did not establish required post-control emissions amounts for any specific categories of sources. Instead, each state determined what portions of its post-control statewide emissions budget to assign to the specific categories of sources in the state, and the assignments were approved in separate SIP approval actions for each state.[61] Adopting the state-determined, sector-specific assignments as Federal requirements at this time would be a substantive change to the existing regulations because it would reduce states' flexibility to revise their previous choices and select other ways of addressing their post-NBTP transition requirements. EPA did not propose substantive changes to the post-NBTP transition provision and made clear that the only provision of the NO_X SIP Call regulations being reopened for

[58] The commenter similarly requests confirmation with regard to EGUs that participate in the original CSAPR seasonal NO_X trading program under the regulations set forth at 40 CFR part 97, subpart BBBBB, but this request is moot because there are no states subject to the NO_X SIP Call with EGUs that continue to participate in the original CSAPR seasonal NO_X trading program.

[59] 83 FR at 48760–61.

[60] *See* 40 CFR 51.121(f)(2)(i)(A)–(C).

[61] *See, e.g.,* 67 FR 68542 (Nov. 12, 2002) (proposing to approve Virginia SIP provisions assigning portions of the statewide emissions budget to large EGUs and large non-EGU boilers and turbines); *see also* 68 FR 40520 (July 8, 2003) (finalizing approval).

substantive comment was the provision concerning part 75 monitoring requirements for large EGUs and large non-EGU boilers and turbines.

Comment: Without expressing any objection to the proposed clarifying revisions to the post-NBTP transition provision at § 51.121(r)(2), one commenter noted the proposed insertion of the words ''or included'' into the phrase ''a State whose SIP . . . includes *or included* an emission trading program approved under [§ 51.121]'' and indicated that the commenter's interpretation of the revised language is that ''no action is necessary to affirm [the commenter's] obligation to maintain NO_X SIP Call emissions control.'' The commenter requested that EPA clarify in this final action if the state's interpretation is not correct.

Response: EPA considers this comment to be outside the scope of the proposal. As discussed in the proposal, the reason for inserting the words ''or included'' in § 51.121(r)(2) was to eliminate any possible mistaken inference that a state's obligation to maintain NO_X SIP Call emission controls might be contingent on whether its SIP currently includes trading program provisions and to reinforce that the Rule's emissions reductions are permanent and enforceable.[62] EPA does not consider this to be a substantive change to the regulations.[63] While the commenter contends that its request for clarification about the need for any further action regarding its SIP arises from the proposed insertion, the commenter has not explained how, if at all, its interpretation of the post-NBTP transition requirements might have been influenced by the proposed insertion, and there is no indication that the commenter's interpretation has changed from its interpretation before issuance of the proposal.[64] Given the lack of any apparent connection between the proposed revision and the commenter's request for clarification, EPA interprets the comment as a request for a determination concerning the commenter's SIP that is outside the scope of the proposal. For this action, EPA did not propose to make any determinations regarding whether any further action is or is not necessary to address any specific state's post-NBTP transition requirements. Accordingly, EPA is not making any such state-specific determinations in this final action, either through express statements or otherwise.

IV. Final Action

For the reasons discussed in the proposal, as supplemented by the discussion in this document, EPA is finalizing amendments to the NO_X SIP Call regulations at 40 CFR 51.121 and 51.122 and amendments to associated cross-references in the CSAPR regulations at 40 CFR 52.38. In place of the current requirement for states to include provisions in their SIPs under which certain emissions sources must monitor their seasonal NO_X mass emissions according to 40 CFR part 75, the amended regulations will allow states to include alternate forms of monitoring requirements in their SIPs for NO_X SIP Call purposes. Other amendments remove obsolete provisions and clarify the remaining regulations but do not substantively alter any current regulatory requirements.

Descriptions of the individual proposed amendments are provided in sections II.B. and II.C. of this document and further discussion is provided in the proposal. EPA is finalizing the amendments generally as proposed with the following further revisions, all of which EPA considers to be non-substantive changes from the proposal:

- To improve clarity, the final regulatory text of § 51.121(i)(4) is being revised from the proposed amended text in two ways. First, the final revisions indicate that where a state chooses to require part 75 monitoring for some or all large EGUs and large non-EGU boilers and turbines for NO_X SIP Call purposes, the ''full set of'' monitoring, recordkeeping, and reporting provisions in subpart H of part 75 must be required. The added words clarify that the amendments do not authorize states to create partial versions of the part 75 regulations that EPA would then have to administer on a state-specific basis. Second, the final revisions remove a phrase indicating that the amended text does not create any exception to any part 75 requirements that may apply to a source under another legal authority. The removed phrase is unnecessary because, on its face, the amended text merely gives states an option to require part 75 monitoring for NO_X SIP Call purposes and does not create or authorize any exceptions to any requirements that may apply to any source under any legal authority. EPA believes the text of the final amendment is clearer and does not differ substantively from the text of the amendment as proposed.

- As discussed in EPA's response to comments in section III.B. of this document, the regulatory text expressing the NO_X SIP Call's emissions reduction requirements is being further clarified by using more precise terminology and documenting the definitions that already apply for two important terms. The final revisions (1) use the standard term ''NO_X ozone season budget'' consistently, (2) specify emissions ''during the ozone season'' where appropriate, (3) indicate the respective years of applicability for the Phase I and final emissions budgets, and (4) add definitions of the terms ''nitrogen oxides or NO_X'' and ''ozone season'' to § 51.121. The term ''nitrogen oxides or NO_X'' is defined as ''all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).'' The term ''ozone season'' is defined as ''the period from May 1 through September 30 of a year.'' The added definitions do not alter any regulatory requirements because they are substantively identical to the definitions that already explicitly apply for purposes of § 51.122 and that have historically been used in practice for purposes of § 51.121 as well.[65] The additional revisions affect the regulatory text at § 51.121(a)(3), (b)(1)(i) and (iii), (e)(1), (e)(2)(i) and (ii), (f) introductory

[62] 83 FR at 48760–61.

[63] EPA notes that the continued applicability of the post-NBTP transition requirements following the replacement of the CAIR seasonal NO_X trading program by the original CSAPR seasonal NO_X trading program was discussed in the preamble for the CSAPR final rule. 76 FR at 48325.

[64] Like several other states, when the NBTP was discontinued, the commenter elected to include its large non-EGU boilers and turbines in the replacement seasonal NO_X trading program established under CAIR, and EPA subsequently approved the removal of the NBTP from its SIP. The commenter is thus a state whose SIP ''included'' a trading program approved under § 51.121. The commenter clearly is not contending that, prior to this action, it believed the requirement to adopt control measures replacing the NBTP no longer applied to it because its SIP no longer ''includes'' the NBTP and that, now, the insertion of the words ''or included'' would cause it to understand the requirement once again applies, although such a contention would have internal logic and would be consistent with the purpose of the proposed clarification. The comment does not set forth the commenter's interpretation of § 51.121(r)(2) prior to this action, but if the commenter is contending that, prior to this action, it understood the requirement to adopt replacement control measures applied to it and that, now, the insertion of the words ''or included'' would cause it to believe the requirement no longer applies, that contention would be illogical. If the commenter is contending that the insertion of the words ''or included'' would alter its interpretation concerning the nature of the replacement control measures that can satisfy the post-NBTP transition requirements, that contention would also be illogical because with or without the added words, the post-NBTP transition provision does not address the nature of replacement control measures that states may or must adopt.

[65] *See* 40 CFR 51.122(a); *see also id.* § 51.50 (definition of ''nitrogen oxides'').

text, (f)(2) introductory text, (f)(2)(i)(C), (g)(1), (g)(2)(i) and (iii), (i), and (j)(1).

• Instead of being removed as proposed, the provision at § 51.121(d)(2) concerning procedural requirements for SIP submissions is being revised to incorporate the updated procedural requirements for SIP submissions at 40 CFR 51.103. In the proposal,[66] EPA stated the intent for the completeness and format requirements in § 51.103 to apply to any future SIP submissions under § 51.121. The final revision makes such applicability explicit and is consistent with several other provisions of § 51.121 that similarly incorporate requirements set forth in other sections of 40 CFR part 51.

• An additional editorial revision is being made to the text of § 51.121(k)(2). The revision clarifies the regulations by standardizing citation formats.

A redline-strikeout document showing the text of 40 CFR 51.121 and 51.122 with the amendments adopted in this action, including all the proposed amendments to the NO_X SIP Call regulations with the further revisions just described, is available in the docket for this action.

The amendments finalized in this action are effective immediately upon publication of the action in the **Federal Register**. This final action is not subject to requirements specifying a minimum period between publication and effectiveness under either Congressional Review Act (CRA) section 801(a)(3), 5 U.S.C. 801(a)(3), or Administrative Procedure Act (APA) section 553(d), 5 U.S.C. 553(d).

CRA section 801(a)(3) generally prohibits a ''major rule'' from taking effect earlier than 60 days after the rule is published in the **Federal Register**. Generally, under CRA section 804(2), 5 U.S.C. 804(2), a major rule is a rule that the Office of Management and Budget (OMB) finds has resulted in or is likely to result in (1) an annual effect on the economy of $100 million or more, (2) major cost or price increases, or (3) other significant adverse economic effects. This action is not a major rule for CRA purposes.

As discussed in section VI.M. of this document, EPA is issuing the amendments under CAA section 307(d). This provision does not include requirements governing the effective date of a rule promulgated under it and, accordingly, EPA has discretion in establishing the effective date. While APA section 553(d) generally provides that rules may not take effect earlier than 30 days after they are published in the **Federal Register**, CAA section 307(d)(1) clarifies that ''[t]he provisions of [APA] section 553 . . . shall not, except as expressly provided in this section, apply to actions to which this subsection applies.'' Thus, APA section 553(d) does not apply to the amendments. Nevertheless, in making this final action effective immediately upon publication, EPA has considered the purposes underlying APA section 553(d). The primary purpose of the prescribed 30-day waiting period is to give affected parties a reasonable time to adjust their behavior and prepare before a final rule takes effect. The amendments made in this action do not impose any new regulatory requirements and therefore do not necessitate time for affected sources to adjust their behavior or otherwise prepare for implementation. Further, APA section 553(d) expressly allows an effective date earlier than 30 days after publication for a rule that ''grants or recognizes an exemption or relieves a restriction.'' This action relieves an existing restriction and allows EPA to approve SIPs with more flexible monitoring requirements, which in turn could lead to reduced monitoring costs for certain sources. Consequently, making the amendments effective immediately upon publication of the action is consistent with the purposes of APA section 553(d).

V. Impacts of the Amendments

The only amendment being finalized in this action that substantively alters existing regulatory requirements is the amendment allowing states to revise their SIPs, for NO_X SIP Call purposes only, to establish monitoring requirements other than part 75 monitoring requirements. The amendments do not change any of the Rule's existing regulatory requirements related to statewide emissions budgets or enforceable mass emissions limits for large EGUs and large non-EGU boilers and turbines. Accordingly, EPA expects that the amendments will have no impact on emissions or air quality. However, EPA does expect that the amendment to the Rule's monitoring requirements will ultimately allow some sources to reduce their monitoring costs because of alternate monitoring requirements established in SIP revisions submitted and approved for their states. Because states, not EPA, will decide whether to revise the monitoring requirements in their SIPs and because EPA lacks complete information on the remaining monitoring requirements that the sources would face, there is considerable uncertainty concerning the amount of monitoring cost reductions that may be facilitated by this action, and EPA did not present a quantitative estimate of potential monitoring cost reductions in the proposal. For purposes of the final action, based in part on improved information obtained through comments, EPA has estimated a range of potential annual monitoring cost reductions from $1.2 million to $3.3 million, with a midpoint estimate of $2.25 million, as further discussed below. Given the absence of any change in emissions or air quality, there would be no change in the public health and environmental benefits attributable to the NO_X SIP Call's emissions reduction requirements, and the likely reductions in monitoring costs therefore are expected to constitute positive net benefits from this action.

As of December 2018, EPA's records indicate that there are approximately 315 existing large EGUs and large non-EGU boilers and turbines in the NO_X SIP Call region that could potentially be affected by the monitoring amendment if all states were to revise their SIPs.[67] To estimate how many of these potentially affected existing units may ultimately face alternate monitoring requirements made possible by the monitoring amendment in this action, EPA is relying on information obtained from states' comments. Six states submitted comments expressing support for the proposed monitoring amendment.[68] While these comments do not in any way obligate the states to submit SIP revisions with alternate monitoring requirements, and additional states that did not submit comments could also choose to submit SIP revisions, EPA believes that the comments provide a reasonable basis for assuming, solely for purposes of developing an estimate of this action's impacts, that the 102 existing units in these six states will ultimately face alternate monitoring requirements of some kind.[69] According to the monitoring plans for these units, 34 units use both gas concentration CEMS

[66] 83 FR at 48761.

[67] The spreadsheet referenced in note 54 *supra* identifies 317 potentially affected existing units. As noted in section II.B. of this document, in the proposal for this action EPA indicated that there were approximately 310 potentially affected existing units. Several additional units started reporting emissions for NO_X SIP Call purposes in 2018.

[68] The six states are Indiana, Michigan, North Carolina, Ohio, South Carolina, and West Virginia.

[69] The 102 units are the existing units identified in the spreadsheet referenced in note 54 *supra* for these six states. While any new units in these states that otherwise would have been required to use CEMS methodologies for NO_X SIP Call purposes could also experience monitoring cost reductions, EPA believes it is reasonable to ignore possible new units in preparing this estimate due to the larger numbers of existing units.

and stack gas flow rate CEMS, 35 units use gas concentration CEMS but not stack gas flow rate CEMS, and 33 units use non-CEMS methodologies. For purposes of estimating potential monitoring cost reductions, EPA has focused on the units currently using CEMS because, as noted in the proposal and in section II.B. of this document, EPA expects that units already using non-CEMS methodologies under part 75 would experience little or no reduction in monitoring costs from alternate monitoring requirements.

To represent the alternate monitoring requirements that the units currently using CEMS could face in a manner that reflects the substantial uncertainty on this issue, EPA has used a range of assumptions. Specifically, to estimate the low end of the range, EPA has assumed that the only change from current requirements is that the 34 units currently using both gas concentration CEMS and stack gas flow rate CEMS will discontinue the use of stack gas flow rate CEMS. EPA considers this assumption to be reasonable for purposes of estimating potential monitoring cost reductions because requirements to use stack gas flow rate CEMS are relatively uncommon in non-part 75 monitoring regulations. EPA also believes the units currently using stack gas flow rate CEMS are more likely than other potentially affected units to continue to be subject to requirements to use gas concentration CEMS because many of these units combust solid fuel and consequently may have triggered emission control requirements and associated emissions monitoring requirements under other regulations. To estimate the high end of the range, EPA has assumed that in addition to the change just described, the 35 units currently using only gas concentration CEMS will switch to a non-CEMS methodology. While it is possible that some of these units may also face continued requirements to use gas concentration CEMS under other regulations, EPA believes the likelihood that these units, none of which combust solid fuel, would be eligible to use non-CEMS methodologies is greater than for the units that currently use both gas concentration CEMS and stack gas flow rate CEMS.

To estimate the monitoring cost reductions associated with the assumed range of changes in monitoring requirements, EPA has used the cost estimates for the various part 75 monitoring methodologies contained in the information collection request (ICR) renewal prepared in conjunction with this action for purposes of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*[70] Based on the cost estimates in the ICR renewal, EPA has estimated that the potential annual cost reduction from discontinuing the use of stack gas flow rate CEMS—including reductions in labor costs, non-labor operating and maintenance costs (including contractor costs), and annualized capital costs—is approximately $35,000 per unit, while the analogous potential annual cost reduction from discontinuing the use of gas concentration CEMS is approximately $60,000 per unit.[71] Multiplying these per-unit amounts by the respective numbers of units yields an estimated range of potential annual monitoring cost reductions from $1.2 million to $3.3 million.[72] The midpoint of this range is a potential reduction in annual monitoring costs of $2.25 million.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and executive orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review, and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to OMB for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by allowing states to establish lower-cost monitoring requirements in their SIPs for some sources as alternatives to part 75 monitoring requirements. Because states, not EPA, will decide whether to revise the monitoring requirements in their SIPs and because EPA lacks complete information on the remaining monitoring requirements that the sources would face, there is considerable uncertainty regarding the amount of monitoring cost reductions that may occur, but EPA has quantified an estimated range in section V of this document. In addition, the proposal's qualitative discussion of the potential monitoring cost reductions[73] is summarized in section II.B. of this document.

C. Paperwork Reduction Act

This action does not impose any new information collection burden under the Paperwork Reduction Act. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060–0445. However, to reflect the amendment allowing states to establish potentially lower-cost monitoring requirements for some sources as alternatives to the current part 75 monitoring requirements, EPA submitted an information collection request (ICR) renewal to OMB in conjunction with the proposal for this action. The ICR document prepared by EPA, which has been assigned EPA ICR number 1857.08, can be found in the docket for this action. None of the comments that EPA received during the public comment period for the proposal addressed the ICR renewal.

Like the current ICR, the ICR renewal reflects the information collection burden and costs associated with part 75 monitoring requirements for sources that are subject to part 75 monitoring requirements under the SIP revisions addressing states' NO_X SIP Call obligations and that are not subject to part 75 monitoring requirements under the Acid Rain Program or a CSAPR trading program. The ICR renewal is generally unchanged from the current ICR except that the renewal reflects projected decreases in the numbers of sources that would perform part 75 monitoring for NO_X SIP Call purposes based on an assumption (made only for purposes of estimating information collection burden and costs for the ICR renewal) that, over the course of the 3-year renewal period, some states will revise their SIPs to replace part 75 monitoring requirements for some sources with lower-cost monitoring requirements. As under the current ICR, all information collected from sources under the ICR renewal will be treated as public information.

Respondents/affected entities: Fossil fuel-fired boilers and stationary combustion turbines that have heat input capacities greater than 250 mmBtu/hr or serve electricity generators

[70] *See* section VI.C. *infra.*

[71] *See* Information Collection Request Renewal for the NO_X SIP Call: Supporting Statement (September 2018) at 12 (Table 6–2), available in the docket for this action. The $35,000 estimate is the rounded difference between the sum of the amounts in the labor, O&M, and annualized capital cost columns on line 6(a) and the sum of the amounts in the same columns on line 6(b). The $60,000 estimate is the rounded difference from the same calculation performed using the amounts on lines 6(b) and 6(c) instead.

[72] Calculation of low end of range: 34 units × $35,000 per unit = $1.2 million.

Calculation of high end of range: 35 units × $60,000 per unit + $1.2 million = $3.3 million.

[73] 83 FR at 48761–62.

with nameplate capacities greater than 25 MW and that are not subject to part 75 monitoring requirements under another program.

Respondents' obligation to respond: Mandatory if elected by the state (40 CFR 51.121(i)(4) as amended).

Estimated number of respondents: 340 (average over 2019–2021 renewal period).

Frequency of response: Quarterly, occasionally.

Total estimated burden: 131,945 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $19,143,004 (per year), includes $8,256,087 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR renewal, the Agency will announce that approval in the **Federal Register**.

D. Regulatory Flexibility Act

I certify that this action will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act, 5 U.S.C. 601–612. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. This action does not directly regulate any entity, but simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations. EPA has therefore concluded that this action will either relieve or have no net regulatory burden for all affected small entities.

E. Unfunded Mandates Reform Act

This action does not contain any unfunded mandate as described in the Unfunded Mandates Reform Act, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector. This action simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. This action simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. This action simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk. This action simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations.

I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer Advancement Act

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA believes that this action is not subject to Executive Order 12898 because it does not establish an environmental health or safety standard. This action simply allows states to establish potentially lower-cost monitoring requirements for some sources and generally streamlines existing regulations. Consistent with Executive Order 12898 and EPA's environmental justice policies, EPA considered effects on low-income populations, minority populations, and indigenous peoples while developing the original NO_X SIP Call. The process and results of that consideration are described in the Regulatory Impact Analysis for the NO_X SIP Call.

L. Congressional Review Act

This action is subject to the Congressional Review Act, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

M. Determinations Under CAA Section 307(b) and (d)

CAA section 307(b)(1), 42 U.S.C. 7607(b)(1), indicates which United States Courts of Appeals have venue for petitions of review of final actions by EPA. This section provides, in part, that petitions for review must be filed in the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) if (i) the Agency action consists of ''nationally applicable regulations promulgated, or final action taken, by the Administrator,'' or (ii) the action is locally or regionally applicable, but ''such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination.'' This action amends existing regulations that apply to 20 states and the District of Columbia, and thus the action applies to the same 21 jurisdictions. The existing regulations were promulgated to address interstate transport of air pollution across the eastern half of the nation and the resulting emissions reductions have been relied on as a basis for actions redesignating areas in at least 20 states to attainment with one or more NAAQS.

The states affected under the regulations and relying on the resulting emissions reductions are located in multiple EPA Regions and Federal judicial circuits. Previous final actions promulgating and amending the existing regulations were nationally applicable and reviewed in the D.C. Circuit. For these reasons, the Administrator determines that this final action is nationally applicable or, in the alternative, is based on a determination of nationwide scope and effect for purposes of section 307(b)(1). Thus, pursuant to section 307(b), any petitions for review of this final action must be filed in the D.C. Circuit within 60 days from the date this final action is published in the **Federal Register**.

CAA section 307(d), 42 U.S.C. 7607(d), contains rulemaking and judicial review provisions that apply to certain EPA actions under the CAA including, under section 307(d)(1)(V), ''such other actions as the Administrator may determine.'' In accordance with section 307(d)(1)(V), the Administrator determines that the provisions of section 307(d) apply to this final action. EPA has complied with the procedural requirements of section 307(d) during the course of this rulemaking.

List of Subjects

40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 52

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated: February 26, 2019.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, parts 51 and 52 of chapter I of title 40 of the *Code of Federal Regulations* are amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

Subpart G—Control Strategy

§ 51.121 [Amended]

■ 2. Section 51.121 is amended by:
■ a. Revising the section heading;
■ b. Removing and reserving paragraph (a)(2);
■ c. Revising paragraph (a)(3);
■ d. In paragraph (b)(1) introductory text, removing the text ''section, the'' and adding in its place the text ''section, each'';
■ e. In paragraph (b)(1)(i), adding the words ''during the ozone season'' after the words ''NO_X emissions'', adding the words ''applicable NO_X ozone season'' before the word ''budget'', and removing the text ''(except as provided in paragraph (b)(2) of this section),'' and adding in its place a semicolon;
■ f. In paragraph (b)(1)(ii), removing the period and adding in its place ''; and'';
■ g. In paragraph (b)(1)(iii), adding the words ''NO_X ozone season'' before the word ''budget'';
■ h. Removing and reserving paragraph (b)(2);
■ i. In paragraph (c)(1), removing the text ''With respect to the 1-hour ozone NAAQS:'';
■ j. In paragraph (c)(2), removing the text ''With respect to the 1-hour ozone NAAQS, the portions of Missouri, Michigan, and Alabama'' and adding in its place the text ''The portions of Alabama, Michigan, and Missouri'';
■ k. Removing and reserving paragraph (d)(1);
■ l. Revising paragraph (d)(2);
■ m. In paragraph (e)(1), adding the words ''ozone season'' before the word ''budget'';
■ n. Revising paragraph (e)(2)(i);
■ o. In paragraph (e)(2)(ii)(A), adding the words ''ozone season'' before the word ''budget'';
■ p. In paragraph (e)(2)(ii)(B), removing the text ''De Kalb'' and adding in its place the text ''DeKalb'';
■ q. In paragraph (e)(2)(ii)(E), removing the text ''St. Genevieve,'' and after the text ''St. Louis City,'' adding the text ''Ste. Genevieve,'';
■ r. Removing paragraphs (e)(3), (4), and (5);
■ s. In paragraphs (f) introductory text and (f)(2) introductory text, adding the words ''ozone season'' before the word ''budget'';
■ t. In paragraph (f)(2)(i)(B), removing the words ''mass NO_X'' and adding in their place the words ''NO_X mass'';
■ u. In paragraph (f)(2)(i)(C), removing ''paragraphs (f)(2)(i)(A) or (f)(2)(i)(B)'' and adding in its place ''paragraph (f)(2)(i)(A) or (B)'' and adding the words ''ozone season'' before the word ''budget'';
■ v. In paragraph (f)(2)(ii), removing the text ''(b)(1) (i)'' and adding in its place the text ''(b)(1)(i)'';
■ w. In paragraph (g)(1), adding the words ''ozone season'' before the word ''budget'';
■ x. In paragraph (g)(2)(i), adding the words ''during the ozone season'' after the words ''mass emissions'', adding the words ''ozone season'' before the word ''budget'', and removing the text ''as set forth for the State in paragraph (g)(2)(ii) of this section,'';
■ y. Removing and reserving paragraph (g)(2)(ii);
■ z. In paragraph (g)(2)(iii), adding the words ''during the ozone season'' after the words ''mass emissions'';
■ aa. In paragraph (h), removing the words ''of this part'';
■ bb. In paragraph (i) introductory text, adding the words ''ozone season'' before the word ''budget'';
■ cc. In paragraphs (i)(2) and (3), removing the words ''of this part'';
■ dd. Revising paragraphs (i)(4) and (5);
■ ee. In paragraph (j)(1), adding the words ''ozone season'' before the word ''budget'';
■ ff. In paragraph (k)(2), removing the text ''CAA'' and adding in its place the text ''CAA, 42 U.S.C. 7414'';
■ gg. In paragraphs (l) and (m), removing the phrase ''of this part'' everywhere it appears;
■ hh. In paragraph (n), removing the text ''§ 52.31(c) of this part'' and adding in its place the text ''40 CFR 52.31(c)'' and removing the text ''§ 52.31 of this part'' and adding in its place the text ''40 CFR 52.31'';
■ ii. In paragraph (o), removing the words ''of this part'';
■ jj. Removing and reserving paragraphs (p) and (q); and
■ kk. Revising paragraph (r).

The revisions read as follows:

§ 51.121 Findings and requirements for submission of State implementation plan revisions relating to emissions of nitrogen oxides.

(a) * * *

(3) As used in this section, these terms shall have the following meanings:

Nitrogen oxides or *NO_X* means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

Ozone season means the period from May 1 to September 30 of a year.

Phase I SIP submission means a SIP revision submitted by a State on or before October 30, 2000 in compliance with paragraph (b)(1)(ii) of this section to limit projected NO_X emissions during the ozone season from sources in the

relevant portion or all of the State, as applicable, to no more than the State's Phase I NO_X ozone season budget under paragraph (e) of this section.

Phase II SIP submission means a SIP revision submitted by a State in compliance with paragraph (b)(1)(ii) of this section to limit projected NO_X emissions during the ozone season from sources in the relevant portion or all of the State, as applicable, to no more than the State's final NO_X ozone season budget under paragraph (e) of this section.

* * * * *

(d) * * *

(2) Each SIP submission under this section must comply with § 51.103 (regarding submission of plans).

(e) * * *

(2)(i) The State-by-State amounts of the Phase I and final NO_X ozone season budgets, expressed in tons, are listed in Table 1 to this paragraph (e)(2)(i):

TABLE 1 TO PARAGRAPH (e)(2)(i)—STATE NO_X OZONE SEASON BUDGETS

State	Phase I NO_X ozone season budget (2004–2006)	Final NO_X ozone season budget (2007 and thereafter)
Alabama	124,795	119,827
Connecticut	42,891	42,850
Delaware	23,522	22,862
District of Columbia	6,658	6,657
Illinois	278,146	271,091
Indiana	234,625	230,381
Kentucky	165,075	162,519
Maryland	82,727	81,947
Massachusetts	85,871	84,848
Michigan	191,941	190,908
Missouri	.....	61,406
New Jersey	95,882	96,876
New York	241,981	240,322
North Carolina	171,332	165,306
Ohio	252,282	249,541
Pennsylvania	268,158	257,928
Rhode Island	9,570	9,378
South Carolina	127,756	123,496
Tennessee	201,163	198,286
Virginia	186,689	180,521
West Virginia	85,045	83,921

* * * * *

(i) * * *

(4) If the revision contains measures to control fossil fuel-fired NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe or boilers, combustion turbines or combined cycle units with a maximum design heat input greater than 250 mmBtu/hr, then the revision may require some or all such sources to comply with the full set of monitoring, recordkeeping, and reporting provisions of 40 CFR part 75, subpart H. A State requiring such compliance authorizes the Administrator to assist the State in implementing the revision by carrying out the functions of the Administrator under such part.

(5) For purposes of paragraph (i)(4) of this section, the term ''fossil fuel-fired'' has the meaning set forth in paragraph (f)(3) of this section.

* * * * *

(r)(1) Notwithstanding any provisions of subparts A through I of 40 CFR part 96 and any State's SIP to the contrary, with regard to any ozone season that occurs after September 30, 2008, the Administrator will not carry out any of the functions set forth for the Administrator in subparts A through I of 40 CFR part 96 or in any emissions trading program provisions in a State's SIP approved under this section.

(2) Except as provided in 40 CFR 52.38(b)(10)(ii), a State whose SIP is approved as meeting the requirements of this section and that includes or included an emissions trading program approved under this section must revise the SIP to adopt control measures that satisfy the same portion of the State's NO_X emissions reduction requirements under this section as the State projected such emissions trading program would satisfy.

§ 51.122 [Amended]

■ 3. Section 51.122 is amended by:

■ a. In paragraph (c)(1)(ii), removing the text ''pursuant to a trading program approved under § 51.121(p) or'';

■ b. In paragraph (e), removing the first sentence;

■ c. In paragraph (f), removing the paragraph heading; and

■ d. Removing the second paragraph (g).

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 4. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

§ 52.38 [Amended]

■ 5. In § 52.38, paragraphs (b)(8)(ii), (b)(8)(iii)(A)(*2*), (b)(9)(ii), and (b)(9)(iii)(A)(*2*) are amended by removing the text ''§ 51.121(p)'' and adding in its place the text ''§ 51.121''.

[FR Doc. 2019–03854 Filed 3–7–19; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 27

[WT Docket No. 06–150; DA 19–77]

Service Rules for the 698–746, 747–762, and 777–792 Bands

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) describes the process for relicensing 700 MHz spectrum that is returned to the Commission's inventory

report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by May 11, 2018. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action adding regulation 9VAC5–30–57 ''Ozone (8-hour 0.070 ppm)'' to the Virginia SIP may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Ozone.

Dated: February 23, 2018.

Cosmo Servidio,

Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart VV—Virginia

■ 2. In § 52.2420, the table in paragraph (c) is amended by adding the entry ''5–30–57'' in numerical order under the heading ''9 VAC 5, Chapter 30 Ambient Air Quality Standards [Part III]'' to read as follows:

§ 52.2420 Identification of plan.

* * * * *

(c) * * *

EPA-APPROVED VIRGINIA REGULATIONS AND STATUTES

State citation	Title/subject	State effective date	EPA approval date	Explanation [former SIP citation]
*	*	*	*	*
9 VAC 5, Chapter 30 Ambient Air Quality Standards [Part III]				
*	*	*	*	*
5–30–57	Ozone (8-hour, 0.070 ppm)	06/01/2016	03/12/2018 [*Insert* ***Federal Register*** *citation*].	
*	*	*	*	*

* * * * *

[FR Doc. 2018–04422 Filed 3–9–18; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA–HQ–OAR–2010–0505; FRL–9975–10–OAR]

RIN 2060–AT59

Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes amendments of certain requirements that are contained within the final rule titled ''Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources,'' published in the **Federal Register** on June 3, 2016 (2016 Rule). The Environmental Protection Agency (EPA) is finalizing amendments of two narrow provisions of the requirements for the collection of fugitive emission components at well sites and compressor stations: Removes the requirement for completion of delayed repair during unscheduled or emergency vent blowdowns, and provides separate monitoring requirements for well sites located on the Alaskan North Slope.

DATES: This final rule is effective on March 12, 2018.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2010–0505. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed in the index, some information is not publically available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Mrs. Karen Marsh, Sector Policies and Programs Division (E143–05), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–1065; email address: *marsh.karen@epa.gov.*

SUPPLEMENTARY INFORMATION:

Outline. The information presented in this preamble is presented as follows:

I. General Information

A. Does this action apply to me?

Categories and entities potentially affected by this action include:

TABLE 1—INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS ACTION

Category	NAICS code [1]	Examples of regulated entities
Industry	211111	Crude Petroleum and Natural Gas Extraction.
	211112	Natural Gas Liquid Extraction.
	221210	Natural Gas Distribution.
	486110	Pipeline Distribution of Crude Oil.
	486210	Pipeline Transportation of Natural Gas.
Federal government		Not affected.
State/local/tribal government		Not affected.

[1] North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be affected by this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability criteria found in the final rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section of this preamble, your delegated authority, or your EPA Regional representative listed in 40 CFR 60.4 (General Provisions).

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of the final action is available on the internet. Following signature by the Administrator, the EPA will post a copy of this final action at *https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry.* Additional information is also available at the same website.

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by May 11, 2018. Moreover, under section 307(b)(2) of the CAA, the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements. Section 307(d)(7)(B) of the CAA further provides that ''[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.'' This section also provides a mechanism for the EPA to convene a proceeding for reconsideration, ''[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment, (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.'' Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC West Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

On June 3, 2016, the EPA published a final rule titled ''Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Final Rule,'' at 81 FR 35824 (''2016 Rule''). The 2016 Rule established new source performance standards (NSPS) for greenhouse gas and volatile organic compound (VOC) emissions from the oil and natural gas sector. This rule addressed, among other things, fugitive emissions at well sites and compressor stations (''fugitive emissions requirements'') and emissions from pneumatic pumps. In addition, for a number of affected facilities (*i.e.,* centrifugal compressors, reciprocating compressors, pneumatic pumps, and storage vessels), the rule required certification by a professional engineer of the closed vent system design and capacity, as well as any technical infeasibility determination relative to controlling pneumatic pumps at well sites. For further information on the 2016 Rule, see 81 FR 35824 (June 3, 2016) and associated Docket ID No. EPA–HQ–OAR–2010–0505. A number of states and industry associations sought judicial review of the rule, and the litigation is currently being held in abeyance. In addition, the EPA received a number of petitions for administrative reconsideration of the rule and on April 18, 2017, convened a proceeding to reconsider certain aspects of the rule, including those related to the above three requirements.

On June 16, 2017, the EPA proposed to stay the fugitive emissions requirements, the well site pneumatic pump requirements, and the requirements for certification of closed vent systems by a professional engineer for 2 years. The EPA proposed the stay of these requirements in order to provide the EPA with sufficient time to propose, take public comment on, and issue a final action on the issues under

reconsideration. See 82 FR 27645 (June 16, 2017). On November 8, 2017, the EPA issued a notice of data availability (NODA), in which the EPA offered additional information in further support of the proposed stay and solicited comments on a suggestion from stakeholders to allow additional time to phase in these requirements as opposed to a stay. See 82 FR 51788 (November 8, 2017). Additionally, the NODA solicited comment and information on several implementation challenges raised by stakeholders. In particular, the EPA broadly solicited comments on issues associated with the requirement to complete repairs on components on a delay of repair (hereinafter referred to as ''delayed repair'' for short in this notice) [1] during emergency or unscheduled shutdowns or vent blowdowns and suggestions for addressing the issues. See 82 FR 51793.

EPA received a broad range of comments and information in response to the proposed stay and the NODA. Relevant to this action is information regarding two specific provisions of the fugitive emissions requirements that we have concluded present immediate compliance concerns: (1) The requirement that delayed repairs must be completed during unscheduled or emergency vent blowdowns that occur within the 2-year repair timeframe and prior to other scheduled events, and (2) the monitoring survey requirements for well sites located on the Alaskan North Slope. See section IV of this preamble for a discussion of these concerns and these final amendments. The Agency is still examining comments related to all other issues raised in the proposal and NODA, including other issues related to delayed repair and the Alaskan North Slope, and is not taking final action with respect to these other matters in this final action.

III. Legal Authority

The legal authority for this final action, which amends two narrow provisions of the fugitive emissions requirements in the 2016 Rule, is the same as that for the promulgation of the 2016 Rule. The EPA promulgated the 2016 Rule pursuant to section 111(b)(1)(B) of the CAA, which requires the EPA to issue ''standards of performance'' for new sources in the list of categories of stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. See 81 FR 35828. CAA section 111(a)(1) defines ''a standard of performance'' as ''a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirement) the Administrator determines has been adequately demonstrated.'' This definition makes clear that the standard of performance must be based on controls that constitute ''the best system of emission reduction . . . adequately demonstrated.'' The standard that the EPA develops, based on the best system of emission reduction (BSER), is commonly a numerical emissions limit, expressed as a performance level *(e.g.,* a rate-based standard). However, CAA section 111(h)(1) authorizes the Administrator to promulgate a work practice standard or other requirements, which reflects the best technological system of continuous emission reduction, if it is not feasible to prescribe or enforce an emissions standard. The work practice standards for fugitive emissions from well sites and compressor stations were promulgated pursuant to CAA section 111(h)(1)(A). See 81 FR 35829.

Agencies have inherent authority to reconsider past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation. *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 515 (2009); *Motor Vehicle Mfrs. Ass'n* v. *State Farm Mutual Auto. Ins. Co.,* 463 U.S. 29, 42 (1983) (''*State Farm*''). ''The power to decide in the first instance carries with it the power to reconsider.'' *Trujillo* v. *Gen. Elec. Co.,* 621 F.2d 1084, 1086 (10th Cir. 1980); see also, *United Gas Improvement Co.* v. *Callery Properties, Inc.,* 382 U.S. 223, 229 (1965); *Mazaleski* v. *Treusdell,* 562 F.2d 701, 720 (D.C. Cir. 1977). Accordingly, in this final rule, the EPA is using the same statutory authority in promulgating the 2016 Rule to amend two provisions of the fugitive emissions requirements in the 2016 Rule. As explained below in section IV, with these two narrowly tailored amendments, the fugitive emissions requirements better reflect BSER for reducing fugitive emissions at well sites and compressor stations.

IV. Summary of Final Action

The EPA is finalizing amendments to two fugitive emissions requirements: (1) The requirements for delayed repairs, and (2) the monitoring survey requirements for well sites located on the Alaskan North Slope.

A. Delayed Repairs

In this action, the EPA is finalizing amendments to the requirements related to delayed repairs. Specifically, the final rule removes the requirement for completion of delayed repairs during unscheduled or emergency vent blowdowns. Owners and operators are still required to complete repairs during the next compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown, or within 2 years, whichever is earlier.

The 2016 Rule requires replacement or repair of a component within 30 days of detection of fugitive emissions, but allows delaying the replacement/repair under certain situations specified in the rule. Specifically, the rule requires that the delayed repair ''must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.'' See 40 CFR 60.5397a(h)(2). While the only unscheduled and emergency event specified in this regulation is with regard to vent blowdown, the EPA stated in the preamble to the 2016 Rule that ''if an unscheduled or emergency vent blowdown, compressor station shutdown, well shutdown, or well shut-in occurs during the delay of repair period, the fugitive emissions components would need to be fixed at that time.'' See 81 FR 35858, June 3, 2016. This preamble language implied that delayed repairs were required if any of these events occurred, regardless of whether it was planned. As mentioned previously, the EPA discussed in the NODA stakeholder feedback that requiring repair or replacement of fugitive emissions components during unscheduled or emergency vent blowdowns could result in natural gas supply disruptions, safety concerns, and increased emissions. In response, the EPA solicited comments on shutdown, shut-in, and blowdown scenarios that could result in technical, safety, and/or environmental issues, as well as suggestions for addressing them. See 82 FR 51793, November 8, 2017. The EPA learned from the comments, through additional specific examples, that the requirement to complete delayed repairs during an unscheduled or emergency vent blowdown could lead to a number of unintended negative consequences. In particular, emissions from requiring delayed repairs during an unscheduled or emergency shutdown, shut-in, or vent blowdown could result in greater emissions than the leaks that are to be

[1] See 40 CFR 60.5397a(h)(2) for delay of repair requirements.

repaired; as such, it could not possibly reflect BSER for addressing fugitive emissions at well sites and compressor stations.

One commenter described configurations at well sites that can lead to an automatic emergency well shut-in and where the rule, if applied as suggested in the preamble, could have unintended consequences.[2] Where well sites have a compressor that collects flash gas from a low pressure separator or a vapor recovery unit that collects flash gas from storage vessels, there are certain safety measures put in place in the event these compressors unexpectedly go offline. Depending on the remoteness of the well site, one safety measure available is to automatically shut in the well to prevent the release of gas from pressure relief valves. In these, and other similar emergency shut-in situations, the equipment is not depressurized so the well can be brought back into production as soon as possible. However, by requiring completion of the delayed repair during such shut-in events, equipment at this well site that have components placed on delayed repair would have to be depressurized and blown down, resulting in emissions that would not have occurred except for the delayed repair requirement and could be higher than the emissions from continuing to delay repair.

Similar scenarios were provided by the commenters for compressor stations, where changes in horsepower demand, upsets of the compressor unit or the station, lightning strikes, power loss, floods, unplanned maintenance or repairs of a pipeline, fire, third-party damage, or instrumentation outages can result in unplanned or emergency blowdowns of certain equipment at a compressor station.[3] When the compressor station is not operating, gas will continue to enter gathering lines until upstream wells are routed to other compressor stations. This gas must be vented or flared to prevent overpressurization of the gathering lines. Repairs can require skilled labor crews and custom fabricated parts, both of which must be scheduled and ordered in advance.[4] Given the unpredictability of these unplanned or emergency events, gas may need to be vented or flared for an extended period of time while the owner or operator organized completion of delayed repairs and before the compressor station is brought back online, thereby creating emissions that would not have occurred except for the delayed repair requirement and could be higher than the emissions from continuing to delay repair. For these reasons, not requiring repair during unplanned or emergency vent blowdowns would limit excess emissions from avoidable blowdowns.

In addition to emissions from avoidable blowdowns described above, several commenters raised concerns about extended gas service disruption.[5] For example, many natural gas transmission pipelines are operating year-round at or near capacity, with little redundancy in the supply chain. Further, some regions do not have access to alternate gas supplies. As we have learned, the requirement for delayed repairs during unplanned or emergency blowdowns can result in the unintended consequence of forcing owners or operators to choose between meeting contractual commitments governed by the Federal Energy Regulatory Commission or complying with leak repair requirements.[6] The disruption to service can also result in loss of home heating during the winter and the loss of natural gas supply to power plants during periods when electricity demands are higher. This is clearly an unintended and undesirable result and should, therefore, be avoided, as demonstrated by the leak repair requirement by the California Air Resource Board (CARB).[7] We note that CARB's leak repair requirement, which CARB commented as being more stringent than the EPA's leak repair requirement in the 2016 Rule, does not require repair, if it would disrupt service.

After examining the comments and supporting data on this issue, the EPA agrees with the commenters that delayed repairs should not be required during an unscheduled or emergency shutdown, shut-in, or vent blowdown due to the potential unintended consequences of further increasing the emissions, in addition to disruption of services. The EPA further concludes that this issue must be addressed immediately to avoid these unintended consequences. Because the proposed 2-year stay or proposed phase-in would offer only a temporary relief from this requirement, which the EPA has already concluded to be unacceptable, the EPA is not finalizing a stay or phase-in of this requirement. Instead, the EPA is taking final action to amend the delayed repair requirement to remove the terms ''unplanned'' and ''emergency'' from the list of events that would require completion of delayed repairs.

B. Alaskan North Slope

We are finalizing amendments to the fugitive emission monitoring requirements for well sites located on the Alaskan North Slope.[8] New well sites that startup production between September and March must conduct initial monitoring within 6 months of the startup of production[9] or by June 30, whichever is later. Well sites that startup production between April and August must continue to meet the 60-day initial monitoring requirement in the 2016 Rule. Similarly, well sites that are modified between September and March must conduct initial monitoring within 6 months of the first day of production for each collection of fugitive emissions components or by June 30, whichever is later. Further, all well sites located on the Alaskan North Slope that are subject to the fugitive emissions requirements must conduct annual monitoring, instead of the semiannual monitoring required for other well sites. Subsequent annual monitoring must be conducted at least 9 months apart, but no more than 12 months apart. The specific repair, recordkeeping, and reporting requirements remain unchanged from the 2016 Rule, except as discussed in section IV.A of this preamble.

Under the 2016 Rule, the initial monitoring survey of fugitive emissions components at a new well site must be conducted within 60 days of startup of production at the new well site. For a collection of modified fugitive emissions components, the initial monitoring survey must be conducted within 60 days of production after the modification. The rule requires

[2] See Docket ID No. EPA–HQ–OAR–2010–0505–12446.

[3] See Docket ID No. EPA–HQ–OAR–2010–0505–12447.

[4] See Docket ID Nos. EPA–HQ–OAR–2010–0505–12421, EPA–HQ–OAR–2010–0505–12424, EPA–HQ–OAR–2010–0505–12430, EPA–HQ–OAR–2010–0505–12436, EPA–HQ–OAR–2010–0505–12446, EPA–HQ–OAR–2010–0505–12447, and EPA–HQ–OAR–2010–0505–12454.

[5] See Docket ID Nos. EPA–HQ–OAR–2010–0505–12430, EPA–HQ–OAR–2010–0505–12436, EPA–HQ–OAR–2010–0505–12446, EPA–HQ–OAR–2010–0505–12447, and EPA–HQ–OAR–2010–0505–12454.

[6] See Docket ID No. EPA–HQ–OAR–2010–0505–12447.

[7] Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, section 95669, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13. Effective date October 1, 2017. This regulation has a phase-in period from January 1, 2018 to December 31, 2019, where fugitive emissions are defined as a leak of 10,000 parts per million (ppm) or greater using EPA Method 21 on a quarterly monitoring frequency. After January 1, 2020, that leak definition decreases to 1,000 ppm on the same monitoring frequency.

[8] Alaskan North Slope is defined in 40 CFR 60.5430a as.

[9] Startup of production is defined in 40 CFR 60.5430a as.

semiannual monitoring thereafter. In response to our NODA soliciting additional comments and information on implementation challenges, the EPA received comments expressing immediate concerns with the timing for conducting fugitive emissions monitoring at well sites on the Alaskan North Slope. The commenters noted that these concerns were raised in comments on the proposed rule in 2015, in addition to petitions for reconsideration following promulgation of the 2016 Rule. The commenters cautioned that the monitoring technology specified in the 2016 Rule (*i.e.,* optical gas imaging (OGI) and the instruments for EPA Method 21) cannot reliably detect methane emissions at well sites on the Alaskan North Slope for a significant portion of the year due to the lengthy period of extreme cold temperatures.[10] According to manufacturer specifications, OGI cameras, which the EPA identified in the 2016 Rule as the BSER for monitoring fugitive emissions at well sites, are not designed to operate at temperatures below −4 °F,[11] and the monitoring instruments for EPA Method 21, which the 2016 Rule provides as an alternative to OGI, are not designed to operate below +14 °F.[12] One commenter provided data, and the EPA confirmed with its own analysis, that temperatures below 0 ^{0}F are a common occurrence, on the Alaskan North Slope between November and April.[13] In light of the above, there is no assurance that the initial and semiannual monitoring that must occur during that period of time are technically feasible.

During the rulemaking for the 2016 Rule, in response to comments expressing concerns with cold temperatures in several regions, the EPA had attempted to address the issue by providing additional flexibility in the form of allowing consecutive semiannual events to take place every 4 to 6 months. However, as commenters on the NODA correctly observed, the EPA did not address the issue as it relates to initial monitoring at well sites on the Alaskan North Slope; further, even with the additional flexibility, semiannual monitoring at well sites located on the Alaskan North Slope could still be required at a time when the temperature is below the operating temperature of the monitoring instruments.

In light of the technical feasibility issue discussed previously, the EPA concludes that the current fugitive emissions monitoring frequencies for well sites do not reflect the BSER for monitoring fugitive emissions components at well sites on the Alaskan North Slope, and that a different fugitive emissions monitoring schedule is warranted for well sites located on the Alaskan North Slope. Specifically, the EPA has amended the 2016 Rule to require that new or modified well sites that startup production between September and March conduct initial monitoring within 6 months of the startup of production or by June 30, whichever is later. We believe that the amendment would assure that initial monitoring take place when both OGI and EPA Method 21 are operable.

In addition, the EPA is amending the 2016 Rule to require annual (instead of semiannual) monitoring of fugitive emissions at well sites on the Alaskan North Slope. During the rulemaking for the 2016 Rule, the EPA had evaluated annual monitoring at well sites and concluded that semiannual monitoring reflected the BSER for detecting fugitive emissions at well sites. During the rulemaking for the 2016 Rule, we stated in response to a comment that there would be months during the semiannual monitoring periods when the OGI camera could work effectively.[14] However, after reconsidering the information provided by commenters and confirmed by the EPA, we now conclude that monitoring may not be technically feasible on the Alaskan North Slope for close to 6 consecutive months (November through April) due to the extreme cold temperatures that could render the monitoring instruments inoperable. Therefore, the EPA now concludes that annual monitoring more accurately reflects the BSER for monitoring fugitive emissions at well sites on the Alaskan North Slope because of the infeasibility of semiannual monitoring. The impracticability is demonstrated by the following example. If initial monitoring were conducted in August, the first semiannual monitoring would be required between December and February. Based on average temperatures during those months, it is unlikely that semiannual monitoring would be possible in this window. Further, in order for well sites on the Alaskan North Slope to conduct semiannual monitoring, the monitoring events would be limited to April/May and October/November, which creates additional difficulties with scheduling monitoring, repairs, and resurveys within the required periods.

The EPA concludes that the Alaskan North Slope issue must be addressed immediately given that we are currently well into the cold weather months. Because both the proposed 2-year stay and the suggestion that we extend the phase-in period for the fugitive emissions requirements would offer only temporary relief from the initial and subsequent monitoring requirements at well sites, which the EPA has already concluded to be inappropriate for the reasons stated above, the EPA is not finalizing a stay or a longer phase-in of these requirements. Rather, the EPA is taking final action to amend the 2016 Rule to provide a separate fugitive emissions monitoring schedule for well sites located on the Alaskan North Slope to accommodate its arctic climate.

V. Summary of Significant Comments and Responses

The EPA received a large number of comments covering a wide range of topics in response to our June 16, 2017, proposal and November 8, 2017, NODA. As discussed in sections II and IV of this preamble, the EPA is still in the process of reviewing many of these comments. As noted previously, however, in the course of this review, the EPA has identified two specific provisions of the fugitive emissions requirements in the 2016 Rule that pose significant and immediate compliance concerns, and EPA is taking final action here to make targeted amendments to the 2016 Rule to address these two concerns. The Agency is still evaluating comments related to other issues raised in the proposal and the NODA and is not taking final action with respect to those issues at this time. Accordingly, we are not responding to those comments at this time. This section summarizes the significant comments relevant to the amendments in this final action, and our response to those comments.

A. The EPA's Legal Authority

The EPA received numerous comments on the legal authorities for its proposal to stay certain requirements of the 2016 Rule for 2 years and for the alternative suggestion of providing

[10] See Docket ID No. EPA–HQ–OAR–2010–0505–12434.

[11] See FLIR Systems, Inc. product specifications for GF300/320 model OGI cameras at *http://www.flir.com/ogi/display/?id=55671.*

[12] See Thermo Fisher Scientific product specification for TVA–2020 at *https://assets.thermofisher.com/TFS-Assets/LSG/Specification-Sheets/EPM-TVA2020.pdf.*

[13] See information on average hourly temperatures from January 2010 to January 2018 at the weather station located at Deadhorse Alpine Airstrip, Alaska. Obtained from the National Oceanic and Atmospheric Administration (NOAA)'s National Centers for Environmental Information and summarized in Docket ID No. EPA–HQ–OAR–2010–0505.

[14] See Chapter 4 of the *EPA's Responses to Public Comments,* page 4–273 located at Docket ID No. EPA–HQ–OAR–2010–0505–7632.

longer phase-in periods for those requirements. Because this final rule does not involve staying or phasing in any requirement in the 2016 Rule, comments specific to the proposed stay and phase-in are deemed outside of the scope of this final action. The EPA is, therefore, not responding to these comments and is not addressing whether such authority exists.

This final rule amends two aspects of the fugitive emissions requirements in the 2016 Rule, which was promulgated pursuant to the EPA's authority to set NSPS standards pursuant to CAA section 111(b) according to the procedures under CAA section 307(d). Summarized below are significant comments on the EPA's authority under CAA sections 111(b) and 307(d) to amend a previously promulgated NSPS.

Comment: The EPA received general comments on the EPA's legal authority to amend the 2016 Rule under CAA section 111. One commenter stated that any revisions to the 2016 Rule must follow the substantive and procedural requirements found in CAA section 111 and 307(d).[15] In order the meet these requirements and amend the NSPS, the commenter stated that the EPA must justify any revisions as being consistent with the statutory mandate, explain the basis for the revision (including supporting record), and follow the procedures established in CAA section 111(b)(1)(B), 42 U.S.C. 7411(b)(1)(B).

The commenters further described the statute's procedural requirements, such as a thorough review of specific factors, such as whether the standard reflects BSER, ''the cost of those standards, any resulting nonair quality health and environmental impacts, energy requirements, the amount of air pollution reduced by the standards, and how the standards may drive technological innovation.'' [16] The commenter stated that a revision to the compliance date (as proposed) would require a factual analysis that demonstrated the new compliance date reflected in the emission reductions achievable through the BSER. Further, the commenter stated that standards must be promulgated that reflect ''improved design and operational advance'' that may not yet be realized by industry, ''so long as there is substantial evidence that such improvements are feasible and will produce the improved performance necessary to meet the standard.'' [17]

The commenters further discussed the holding in the *National Association of Home Builders* case in 2012. ''The fact that the original [rule] was consistent with congressional intent is irrelevant as long as the amended rule is also 'permissible under the statute.' '' [18] In that case, the petitioners acknowledged that, although they believed the original rule was better, the amended rule was permissible. Oral Arg. Recording at 17:40-:43. As *Fox* made clear, that ''suffices'' as far as the court is concerned. *Fox,* 556 U.S. at 515. Further, as *Fox* noted, the Supreme Court has ''neither held nor implied that every agency action representing a policy change must be justified by reasons more substantial than those required to adopt a policy in first instance.'' *Fox,* 556 U.S. at 514 (citing *Motor Vehicle Manufacturers Ass'n of the United States, Inc., et al.,* v. *State Farm Mutual Automobile Insurance Co., et al.,* 463 U.S. 29, 42 (1983)). To the contrary, according to the commenters, the *State Farm* case affirmed that ''[a]n agency's view of what is in the public interest may change, either with or without a change in circumstances.'' *State Farm,* 463 U.S. at 57 (quoting *Greater Boston Television Corp.* v. *FCC,* 444 F.2d 841, 852 (D.C. Cir.1970)); see *Am. Trucking Ass'ns* v. *Atchison, Topeka & Santa Fe Ry. Co., et al.,* 387 U.S. 397, 416 (1967) (declaring that an agency, ''in light of reconsideration of the relevant facts and its mandate, may alter its past interpretation and overturn past administrative rulings''). *Nat'l Ass'n of Home Builders,* 682 F.3d at 1037.

Response: The EPA agrees with the comment that it has authority to amend an NSPS when it demonstrates that such revision is consistent with the mandate of section 111(b) of the CAA and reasonably explain the basis for the revision based on the record before the Agency, as required by section 307(d) of the CAA. The EPA has done so in this final action and need not address at this time if this is the sole source of authority that the EPA may have to amend or stay an NSPS.

A standard of performance promulgated under section 111(b) of the CAA must reflect the BSER for that emission source. In the 2016 Rule, the EPA conducted BSER analyses for reducing fugitive emissions at well sites and compressor stations, which resulted in the work practice standards promulgated in that rule. As explained below in this section and elsewhere in this notice, in the process of the current rulemaking, the EPA has identified two narrow provisions of the fugitive emissions requirements that pose immediate compliance concerns. The first issue concerns the potential that the current requirements for delayed repairs could result in an increase (instead of a reduction) of emissions and service disruption. The other issue concerns the technical feasibility of complying with the timeframe specified in the 2016 Rule for monitoring fugitive emissions at well sites in the Alaskan North Slope due to its extreme cold temperature for a lengthy period of time, which could render the monitoring instrument inoperable. After examining the comments and information on these two specific concerns, we conclude that the BSER and the resulting fugitive emissions requirements in the 2016 Rule did not adequately address these two compliance concerns and that revision is warranted. The revision is based on comments, data, and other information submitted during the rulemaking process, as well as our own analyses, all of which can be found in Docket ID No. EPA–HQ–OAR–2010–0505. A more detailed discussion of our revised analyses and amendment can be found below in this section as well as in section IV of this preamble.

B. Delayed Repairs

Comment: Twelve commenters provided information related to the requirements for delayed repairs in 40 CFR part 60, subpart OOOOa. Ten commenters [19] supported a stay and/or suggested specific changes to the regulation to address repairs during unplanned and emergency vent blowdowns, while two commenters [20] opposed any changes to the requirement for delayed repairs.

The commenters that supported changes reiterated comments contained in their petitions for reconsideration following the promulgation of the 2016

[15] See Docket ID No. EPA–HQ–OAR–2010–0505–12451.

[16] See 80 FR 64510, 64538 (October 23, 2015) (quoting *Sierra Club* v. *Costle,* 657 F.2d 298, 326, 347 (D.C. Cir. 1981)). See also 42 U.S.C. 7411(a)(1), (b)(1)(B), (h)(1).

[17] See *Sierra Club* v. *Costle* 657 F.2d at 364 and *Portland Cement Ass'n* v. *EPA,* 665 F.3d 177, 190 (D.C. Cir. 2011).

[18] *Nat'l Ass'n of Home Builders, et al.,* v. *EPA,* 682 F.3d 1032, 1037 (citing *Fox,* 556 U.S. at 515).

[19] See Docket ID No. EPA–HQ–OAR–2010–0505–12417, Docket ID No. EPA–HQ–OAR–2010–0505–12421, Docket ID No. EPA–HQ–OAR–2010–0505–12422, Docket ID No. EPA–HQ–OAR–2010–0505–12424, Docket ID No. EPA–HQ–OAR–2010–0505–12430, Docket ID No. EPA–HQ–OAR–2010–0505–12436, Docket ID No. EPA–HQ–OAR–2010–0505–12446, Docket ID No. EPA–HQ–OAR–2010–0505–12447, Docket ID No. EPA–HQ–OAR–2010–0505–12454, and Docket ID No. EPA–HQ–OAR–2010–0505–12456.

[20] See Docket ID No. EPA–HQ–OAR–2010–0505–12444, Docket ID No. EPA–HQ–OAR–2010–0505–12451 (part 1 of comments), and Docket ID No. EPA–HQ–OAR–2010–0505–12452 (part 2 of comments).

Rule. The commenters stated that by requiring repairs during unplanned or emergency events, the actual emissions could be higher than the emissions of the delayed repair for that component. For instance, requiring repairs during unplanned or emergency events may require venting of equipment that is not being repaired and that would not otherwise be vented during that shutdown, potentially resulting in emissions much larger than those of the leak itself. Further, the commenters asserted that prolonged shutdowns may be encountered while repairs are made, which would affect both upstream and downstream users. Specifically, these repairs could result in the need to vent or flare gas upstream at a production facility if the midstream compressor station has to remain offline. Further, gas supply could be limited for downstream users, causing critical issues with the provision of power or heat to end users reliance on natural gas.

One commenter [21] provided specific data regarding components monitored under the fugitive program in 40 CFR part 60, subpart OOOOa. The commenter references an evaluation performed on 22 of their compressor stations. This evaluation showed that 95-percent of all leaks (345 of 362 leaks) occurring at these stations between 2015 and 2017 were repaired within 30 days, leaving only 5-percent to be placed on a delayed repair. When repair was delayed, most repairs were completed within 90 days of leak detection. Two commenters [22] suggested specific edits to the regulation. Specifically, these edits remove reference to the requirement for repairs to be completed during unscheduled, planned, or emergency vent blowdowns and limits repairs at compressor stations to scheduled shutdowns for maintenance. Further, these commenters suggested additional language to require additional justification for delaying repairs beyond a shutdown, requiring Administrator approval on a case-by-case basis. Additional comments and information are discussed in section IV of this preamble.

In contrast, the two commenters that opposed changes to the delayed repair requirements cited a lack of information to support either a stay or compliance deadline extension. One commenter [23] suggests that since the leaks for which repairs are delayed were found prior to any shutdown (whether planned or not), the company had time to make arrangements to obtain replacement parts; thus, allowing repair during that next shutdown event. Further, the commenter asserted that the EPA has provided no data to demonstrate why a stay is necessary for the entire fugitive program to accommodate such a small set of leaks given that the data the EPA does have suggests the majority of leaks are repaired at the time of the monitoring survey. Another commenter [24] asserted that the requirement for delayed repairs is more accommodating than it needs to be when compared to the requirements found in California's rule. The commenter explained, ''California's regulation requires leaks to be repaired within 14 calendar days, except for leaks involving critical components, which must be repaired by the end of the next process shutdown or within 12 months, whichever is sooner.''

Response: The EPA is amending the requirements for delayed repair in this final action. Specifically, the EPA is removing the terms ''unplanned'' and ''emergency,'' used in reference to vent blowdowns and added the term ''scheduled'' before the list of scenarios when delayed repair must be completed. As several commenters noted and as discussed in section IV.A of this preamble, completion of repair during an unscheduled or emergency event could require a blowdown of equipment that was not otherwise necessary in order to repair components on delayed repair. Due to the potential for increasing emissions, the current requirements for delayed repair do not reflect the BSER for addressing fugitive emissions at well sites and compressor stations. In addition, as discussed in section IV.A of this preamble, not requiring delayed repair during unscheduled vent blowdowns would avoid the potential of service disruption. As mentioned in section IV.A of this preamble, we note that under CARB's leak repair requirements,[25] delayed repair is permitted if gas service is critical to public gas system operation; thereby, highlighting the importance of not disrupting gas service. According to the data received, only around 5-percent of leaks are placed on delay for repair. Further, unscheduled or emergency vent blowdowns are but one of many scenarios where delayed repair must be completed. Owners or operators are still required to complete repairs on components during the next scheduled compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown, or within 2 years, whichever is earlier. Accordingly, the requirement for delayed repair, as amended, still requires that repairs occur as soon as possible while reducing the potential for unintended emissions releases and service disruptions.

As discussed earlier, this issue must be addressed immediately to avoid potentially increasing emissions and/or disrupting gas supply. The EPA acknowledges that there are other comments concerning other aspects of the requirements for delayed repair in the fugitive emissions requirements, and that the EPA continues to evaluate these comments. Should any of these comments warrant additional changes to the fugitive requirements, the EPA intends to address them separately.

C. Alaskan North Slope

Comment: Three commenters [26] provided comments related to compliance with the fugitive emissions monitoring requirements in extreme cold weather conditions. These comments related to the limitations of the monitoring technologies and worker safety concerns. The commenters stated that the EPA should exempt well sites and compressor stations located on the Alaskan North Slope from the fugitive emissions monitoring requirements. At a minimum, two commenters stated that the EPA should stay or extend the compliance deadline for initial monitoring at these well sites. Additionally, two commenters stated that extreme cold weather conditions can occur outside of the Alaskan North Slope and these commenters requested similar stays or extensions of the compliance deadlines for any location experiencing these conditions. The commenters reiterated comments submitted in the 2015 proposal and subsequent petitions for reconsideration. Specifically, the commenters stated the technological limitations and worker safety considerations in the Arctic

[21] See Docket ID No. EPA–HQ–OAR–2010–0505–12430.

[22] See Docket ID No. EPA–HQ–OAR–2010–0505–12421 and Docket ID No. EPA–HQ–OAR–2010–0505–12447.

[23] See Docket ID No. EPA–HQ–OAR–2010–0505–12451 (part 1 of comments) and Docket ID No. EPA–HQ–OAR–2010–0505–12452 (part 2 of comments).

[24] See Docket ID No. EPA–HQ–OAR–2010–0505–12444.

[25] Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, section 95669, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13. Effective date October 1, 2017.

[26] See Docket ID No. EPA–HQ–OAR–2010–0505–12434, Docket ID No. EPA–HQ–OAR–2010–0505–12436, and Docket ID No. EPA–HQ–OAR–2010–0505–12446.

environment warrant an exemption from monitoring.

One commenter provided manufacturer specifications for three of the commonly used monitoring instruments (OGI camera, toxic vapor analyzer (TVA), and multi gas monitors).[27] The commenter noted that the specifications indicate the lowest operating temperature for any of the instruments is −4 °F.[28] This commenter further provided average hourly temperature by month for the years 2012 through 2014. This data indicated that average hourly temperatures on the Alaskan North Slope were below −4 °F for approximately 5 months (December through April). Three commenters stated that while there is a waiver from quarterly monitoring at compressor stations when average temperatures are below 0 °F for 2 consecutive months, there is no similar waiver for semiannual monitoring well sites, nor a waiver from initial monitoring at either well sites or compressor stations. The commenters, therefore, stated the combination of average hourly temperatures on the Alaskan North Slope and the operating limitations of the monitoring instruments pose immediate compliance implications.

Finally, two of the commenters stated that the EPA should exempt well sites and compressor stations located on the Alaskan North Slope from fugitive emissions monitoring similar to the exemptions from leak detection and repair at natural gas processing plants provided in NSPS OOOO and OOOOa.[29] These commenters stated the reasons for applying an exemption to the natural gas processing plants are also valid for well sites and compressor stations.

Response: The EPA agrees with the commenters that available monitoring technologies (OGI and, for EPA Method 21, TVA and multi gas meters) are not designed to operate below −4 °F or +14 °F, respectively.[30] In addition to the information provided by the commenters, information from the NOAA demonstrate average temperatures on the Alaskan North Slope make it technically infeasible to perform monitoring during a nearly 6-month period.[31] As we are already well within this period, the EPA must act immediately to avoid requiring fugitive emissions monitoring at well sites located on the Alaskan North Slope when the average temperature there is below the operating temperature of any of the available monitoring instruments. Therefore, the EPA is amending 40 CFR part 60, subpart OOOOa, to extend the initial monitoring deadline and allow annual fugitive emissions monitoring at well sites located on the Alaskan North Slope. The EPA is not amending 40 CFR part 60, subpart OOOOa, fugitive emissions monitoring requirements for compressor stations located on the Alaskan North Slope because the commenters have stated there are no compressor stations currently subject to 40 CFR part 60, subpart OOOOa; therefore, there is no immediate compliance concern to address for these requirements at this time.[32]

As the commenters noted, the issues with conducting fugitive emissions monitoring at well sites located on the Alaskan North Slope were raised in the comments on the proposed 40 CFR part 60, subpart OOOOa. In the EPA's responses to public comments on this issue, the EPA stated that specific flexibilities were added to the fugitive emissions monitoring program to avoid potential compliance concerns on the Alaskan North Slope. Specifically, the repair deadline was extended from 15 to 30 days, with an additional 30 days to complete the resurvey after repair; semiannual monitoring at well sites is allowed every 4 to 6 months; when average temperatures are below 0 °F for 2 consecutive months, quarterly monitoring is waived at compressor stations, and Method 21 was added as an alternative method for leak detection and resurvey.[33] As one commenter noted, the EPA recognized the challenges with monitoring instrument operation at low temperatures for compressor stations, but did not extend a similar waiver from monitoring for well sites.[34] Further, it is not clear that the flexibilities identified above assure that monitoring would not be required when the temperature on the Alaskan North Slope is below the operating temperature of the monitoring instrument. The commenters reiterated this concern in the comments on the proposed stay and NODA.

We revisited the issue and reviewed both the relevant record for the 2016 Rule as well as additional information received subsequent to the rulemaking. Based on this evaluation, we recognized that a separate initial monitoring requirement was necessary for well sites that startup production during the months when it may be technically infeasible to meet the 60-day initial monitoring requirement.

For instance, we examined the scenario of a new well starting production in September. Under the current requirements, the initial monitoring survey would be required within 60 days of the startup of production. This would put the deadline in October or November, depending on when the well started producing in September.[35] The EPA recognized from the data provided that these 2 months may have issues with the feasibility of completing monitoring due to changing weather conditions moving into winter. If we set a deadline for initial monitoring 6 months from startup of production, then monitoring would be required by March, when temperatures are still not warm enough for instrument operation. While the average temperatures may be sufficiently warm starting in the middle of spring, information discussed in the Response to Comments document raised concerns with melting snow, flooding, and transportation issues during this time.[36] Additionally, we are concerned with potentially constraining affected sources' ability to schedule and acquire requisite personnel and equipment if we were to require all well sites that start production between September and March to conduct initial monitoring in April or May. These well sites would forever be locked into performing both initial and all subsequent monitoring at the same time each year. We do not believe that it is appropriate to place such constraint on the well site's ability to schedule monitoring events. Based on average temperatures, we are confident that monitoring can occur during the

[27] See Docket ID No. EPA–HQ–OAR–2010–0505–12434.

[28] See FLIR Systems, Inc. Product specifications for GF300/320 model OGI cameras at *http://www.flir.com/ogi/display/?id=55671.*

[29] See Docket ID No. EPA–HQ–OAR–2010–0505–12434 and Docket ID No. EPA–HQ–OAR–2010–0505–12446.

[30] See FLIR Systems, Inc. product specifications for GF300/320 model OGI cameras at *http://www.flir.com/ogi/display/?id=55671* and Thermo Fisher Scientific product specification for TVA–2020 at *https://assets.thermofisher.com/TFS-Assets/LSG/Specification-Sheets/EPM-TVA2020.pdf.*

[31] See information on average hourly temperatures from January 2010 to January 2018 at the weather station located at Deadhorse Alpine Airstrip, Alaska. Obtained from NOAA's National Centers for Environmental Information and summarized in Docket ID No. EPA–HQ–OAR–2010–0505.

[32] See ''Discussion of Comment Submitted on the NODA with ConocoPhillips Alaska, Inc.'' located at Docket ID No. EPA–HQ–OAR–2010–0505.

[33] See ''EPA's Responses to Public Comments,'' Chapter 4, pages 4–267, 4–268, 4–273, and 4–276. *https://www.regulations.gov/document?D=EPA-HQ-OAR-2010-0505-7632.*

[34] See Docket ID No. EPA–HQ–OAR–2010–0505–12446.

[35] Similar issues are realized by well sites starting up between October and March, such as extreme low temperatures, concerns with snow melt and flooding, and logistical issues associated with schedule flexibility.

[36] See ''EPA's Responses to Public Comments,'' Chapter 4, page 4–268. *https://www.regulations.gov/document?D=EPA-HQ-OAR-2010-0505-7632.*

summer months. Therefore, we have amended the 2016 Rule to require that, for each new or modified well site located on the Alaskan North Slope that starts production between September and March, the owner or operator has 6 months, or until June 30, whichever is later, to complete initial monitoring of the fugitive emissions components. The amendments, which provide both a time frame and specific date, would require monitoring as soon as feasible while avoiding the concerns described above. For each new or modified well site located on the Alaskan North Slope that starts production between September and March, the owner or operator has 6 months, or until June 30, whichever is later to complete initial monitoring of the fugitive emissions components.

The EPA agrees with the commenters that there are immediate compliance concerns due to the operating limitations of monitoring instruments. Therefore, we are finalizing an amendment to the timeframe for the fugitive emission monitoring program for well sites located on the Alaskan North Slope. Specifically, owners or operators must meet the initial compliance deadline of 60 days from the startup of production, unless the well site starts production between September and March. Those well sites that startup production between September and March must complete initial monitoring within 6 months of startup of production or by June 30, whichever is later. Additionally, owners or operators must perform annual monitoring for fugitive emissions, following the initial monitoring survey at all affected well sites located on the Alaskan North Slope, regardless of the startup date. Subsequent monitoring surveys must occur at least every 12 months, with consecutive monitoring surveys conducted at least 9 months apart. The requirements for repair, recordkeeping, and reporting remain the same as those in the 2016 Rule. Recognizing there are several months in which temperatures are within the operating temperature range for the monitoring instruments, the EPA concludes owners or operators have enough flexibility to complete monitoring surveys in this timeframe. Any further amendments for the Alaskan North Slope will be addressed separately. This amendment only applies at well sites located on the Alaskan North Slope. All other well sites must continue to comply with the initial, semiannual, or quarterly monitoring requirements, as appropriate.

With respect to comments on exempting facilities located on the Alaskan North Slope from fugitive monitoring requirements, changes to low temperature waivers, or any other concerns raised by the commenters related to cold weather, addressing them will likely require additional information and analysis. The EPA will continue evaluating these comments.

VI. Impacts of the Final Amendments

Although there will be cost savings related to not requiring delayed repairs during unscheduled or emergency events, as well as forgone benefits related to the reductions of fugitive emissions that might have occurred following these repairs, the EPA does not have cost or economic data related to this provision because of the unplanned nature of these events. Therefore, we are unable to determine the cost savings or forgone benefits of amending the requirements for delayed repair requirement related to unscheduled or emergency events.

In order to determine the impacts of the amendments to the fugitive emissions requirements for well sites located on the Alaskan North Slope, we used the same assumptions and methods used to estimate impacts of the 2016 Rule. Specifically, we used the number of affected sources located on the Alaskan North Slope, and the cost and emission reductions estimated for well sites at semiannual and annual fugitive monitoring frequencies that were assumed in the 2016 Rule. The cost savings and emission reductions estimated as a result of these amendments are presented in Tables 2 and 3, respectively. For more information on the assumptions used in this analysis, as well as the costs and emission reductions for fugitive emissions requirements at well sites, see the *Background Technical Support Document for the Final New Source Performance Standards 40 CFR part 60, subpart OOOOa* (TSD) located at Docket ID No. EPA–HQ–OAR–2010–0505–7631. Note that the costs in the TSD are in 2012 dollar years, and the cost savings presented here are in 2016 dollar years. The amended fugitive monitoring requirements for well sites located on the Alaskan North Slope will save approximately $24,000 per year in compliance costs, after accounting for forgone natural gas recovery. This amendment will also result in approximately 34 short tons of forgone methane emission reductions, or 772 tons of carbon dioxide equivalent (CO_2E).

TABLE 2—ESTIMATED COST SAVINGS OF THE AMENDED FUGITIVE MONITORING REQUIREMENTS ON THE ALASKAN NORTH SLOPE

	Compliance cost savings			Total annualized cost savings (3%)		Total annualized cost savings (7%)	
	Capital cost savings	Annual operating cost savings	Forgone product recovery	W/o product recovery	W/Product recovery	W/o product recovery	W/Product recovery
NG Well Pads	$1,300	$29,000	$6,700	$29,000	$22,000	$29,000	$22,000
Oil Well Pads	110	2,400	210	2,400	2,200	2,400	2,200
Total	1,400	31,000	6,900	31,000	24,000	31,000	24,000

TABLE 3—ESTIMATED FORGONE EMISSION REDUCTIONS OF THE AMENDED FUGITIVE MONITORING REQUIREMENTS ON THE ALASKAN NORTH SLOPE

	Affected source count	Forgone emission reductions				Forgone natural gas savings (Mcf[2])
		Methane (short tpy[1])	VOC (tpy)	HAP (tpy)	CO_2E (tpy)	
NG Well Pads	30	33	9	0	748	1,911

TABLE 3—ESTIMATED FORGONE EMISSION REDUCTIONS OF THE AMENDED FUGITIVE MONITORING REQUIREMENTS ON THE ALASKAN NORTH SLOPE—Continued

	Affected source count	Forgone emission reductions				Forgone natural gas savings (Mcf[2])
		Methane (short tpy[1])	VOC (tpy)	HAP (tpy)	CO_2E (tpy)	
Oil Well Pads	3	1	0	0	24	61
Total	33	34	9	0	772	1,972

[1] tons per year.
[2] thousand cubic feet.

VII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by amending the requirement that components on a delayed repair must conduct repairs during unscheduled or emergency vent blowdowns, and adding flexibilities for the monitoring survey requirements for well sites located on the Alaskan North Slope.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. The information collection requirements in the final 40 CFR part 60, subpart OOOOa have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document prepared by the EPA has been assigned EPA ICR 2523.01. This action does not result in changes to the submitted ICR for 40 CFR part 60, subpart OOOOa, so the information collection estimates of project cost and hour burdens have not been revised.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An Agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. This action finalizes amendments for two specific requirements in the 2016 Rule. This action will not increase the burden on small entities subject to this rule. The EPA prepared a final RFA analysis for the 2016 Rule, which is available as part of the Regulatory Impact Analysis in the docket at Docket ID No. EPA–HQ–OAR–2010–0505–7630. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action finalizes amendments for two specific requirements in the 2016 Rule. Any impacts on children's health caused by the amendments in the rule will be limited, because the scope of the amendments is limited. The Agency, therefore, concludes it is more appropriate to determine the impact on children's health in the context of any substantive changes potentially proposed in the future as part of the reconsideration of the 2016 Rule (as granted on April 18, 2017).

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The basis for this determination can be found in the 2016 Rule (81 FR 35894).

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

This action finalizes amendments for two specific requirements in the 2016 Rule. Any impacts on minority populations and low-income populations caused by the amendments in the rule will be limited, because the scope of the amendments is limited. The

Agency, therefore, concludes it is more appropriate to determine the impact on minority populations and low-income populations in the context of any substantive changes potentially proposed in the future as part of the reconsideration of the 2016 Rule (as granted on April 18, 2017).

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Reporting and recordkeeping.

Dated: February 23, 2018.

E. Scott Pruitt,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart OOOOa—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015

■ 2. Section 60.5397a is amended by revising paragraphs (f)(1), (g)(1) and (2), and (h)(2) to read as follows:

§ 60.5397a What fugitive emissions GHG and VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site and the affected facility which is the collection of fugitive emissions components at a compressor station?

* * * * *

(f) (1) You must conduct an initial monitoring survey within 60 days of the startup of production, as defined in § 60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 60 days of the first day of production for each collection of fugitive emission components after the modification or by June 3, 2017, whichever is later. Notwithstanding the preceding deadlines, for each collection of fugitive emissions components at a well site located on the Alaskan North Slope, as defined in § 60.5430a, that starts up production between September and March, you must conduct an initial monitoring survey within 6 months of the startup of production for a new well site, within 6 months of the first day of production after a modification of the collection of fugitive emission components, or by the following June 30, whichever is later.

* * * * *

(g) * * *

(1) Except as provided herein, a monitoring survey of each collection of fugitive emissions components at a well site within a company-defined area must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart. A monitoring survey of each collection of fugitive emissions components at a well site located on the Alaskan North Slope must be conducted at least annually. Consecutive annual monitoring surveys must be conducted at least 9 months apart.

(2) A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

* * * * *

(h) * * *

(2) If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown, well shutdown, well shut-in, after a planned vent blowdown or within 2 years, whichever is earlier.

* * * * *

[FR Doc. 2018–04431 Filed 3–9–18; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 64

[Docket ID FEMA–2018–0002; Internal Agency Docket No. FEMA–8521]

Suspension of Community Eligibility

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final rule.

SUMMARY: This rule identifies communities where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP) that are scheduled for suspension on the effective dates listed within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will not occur and a notice of this will be provided by publication in the **Federal Register** on a subsequent date.

DATES: The effective date of each community's scheduled suspension is the third date (''Susp.'') listed in the third column of the tables in this rulemaking.

ADDRESSES: Information identifying the current participation status of a community can be obtained from FEMA's Community Status Book (CSB).The CSB is available at *https://www.fema.gov/national-flood-insurance-program-community-status-book.*

FOR FURTHER INFORMATION CONTACT: If you want to determine whether a particular community was suspended on the suspension date or for further information, contact Adrienne L. Sheldon, PE, CFM, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 400 C Street SW, Washington, DC 20472, (202) 212–3966.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase Federal flood insurance that is not otherwise generally available from private insurers. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2017–0668, EPA–HQ–OAR–2017–0669, EPA–HQ–OAR–2017–0670; FRL–9988–80–OAR]

RIN 2060–AT72

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action on the residual risk and technology reviews (RTRs) conducted for the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing emissions during periods of startup, shutdown, and malfunction (SSM); electronic reporting for performance test results and compliance reports; the addition of EPA Method 18 and updates to several measurement methods; and the addition of requirements for periodic performance testing. Additionally, several miscellaneous technical amendments will be made to improve the clarity of the rule requirements. We are making no revisions to the numerical emission limits based on these risk analyses or technology reviews.

DATES: This final rule is effective on March 15, 2019. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of March 15, 2019.

ADDRESSES: The EPA has established dockets for this action under Docket ID Nos. EPA–HQ–OAR–2017–0668 for 40 Code of Federal Regulations (CFR) part 63, subpart OOOO, Printing, Coating, and Dyeing of Fabrics and Other Textiles; EPA–HQ–OAR–2017–0669 for 40 CFR part 63, subpart RRRR, Surface Coating of Metal Furniture; or EPA–HQ–OAR–2017–0670, for 40 CFR part 63, subpart NNNN, Surface Coating of Large Appliances, as applicable. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about the final rule for the Surface Coating of Large Appliances source category, contact Ms. Kim Teal, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541–5580; fax number: (919) 541–4991; and email address: *teal.kim@epa.gov.*

For questions about the final rule for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, contact Ms. Paula Hirtz, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2618; fax number: (919) 541–4991; and email address: *hirtz.paula@epa.gov.*

For questions about the final rule for the Surface Coating of Metal Furniture source category, contact Ms. J. Kaye Whitfield, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2509; fax number: (919) 541–4991; and email address: *whitfield.kaye@epa.gov.*

For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–4843; fax number: (919) 541–0840; and email address: *sarsony.chris@epa.gov.*

For information about the applicability of the NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building (Mail Code 2221A), 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 564–1395; and email address: *cox.john@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

ASTM—ASTM International
CAA—Clean Air Act
CDX—Central Data Exchange
CEDRI—Compliance and Emissions Data Reporting Interface
CFR—Code of Federal Regulations
CRA—Congressional Review Act
EPA—Environmental Protection Agency
ERT—Electronic Reporting Tool
FR—Federal Register
gal—gallon
HAP—hazardous air pollutant(s)
HCl—hydrochloric acid
HF—hydrogen fluoride
HI—hazard index
HQ—hazard quotient
HQREL—hazard quotient recommended exposure limit
HVLP—high-volume, low-pressure
IBR—incorporation by reference
ICR—Information Collection Request
kg—kilogram
km—kilometer
lb—pound
MACT—maximum achievable control technology
MIR—maximum individual risk
NAICS—North American Industry Classification System
NESHAP—national emission standards for hazardous air pollutants
NTTAA—National Technology Transfer and Advancement Act
OAQPS—Office of Air Quality Planning and Standards
OMB—Office of Management and Budget
OSHA—Occupational Safety and Health Administration
PB–HAP—hazardous air pollutants known to be persistent and bioaccumulative in the environment
ppmv—parts per million by volume
PRA—Paperwork Reduction Act
RFA—Regulatory Flexibility Act
RTR—residual risk and technology review
SSM—startup, shutdown, and malfunction
TOSHI—target organ-specific hazard index

tpy—tons per year
UMRA—Unfunded Mandates Reform Act
VOC—volatile organic compound

Background information. On September 12, 2018, the EPA proposed revisions to the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles (Fabrics); and the Surface Coating of Metal Furniture NESHAP, based on our RTR. In this action, we are finalizing decisions and revisions for the rules. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposed rules and the EPA's responses to those comments are available in ''Summary of Public Comments and Responses for the Risk and Technology Reviews for the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture,'' in Docket ID Nos. EPA–HQ–OAR–2017–0668, EPA–HQ–OAR–2017–0669, and EPA–HQ–OAR–2017–0670. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket for each subpart.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP Source category	NAICS [1] code	Regulated entities [2]
Surface Coating of Large Appliances	335221	Household laundry equipment.
	335222	Household cooking equipment.
	335224	Household refrigerators and freezers.
	335228	Other major household appliances.
	333312	Commercial laundry, dry cleaning, and pressing equipment.
	333415	Air-conditioners (except motor vehicle), comfort furnaces, and industrial refrigeration units and freezers (except heat transfer coils and large commercial and industrial chillers).
	[3] 333319	Other commercial/service industry machinery, e.g., commercial dishwashers, ovens, and ranges, etc.
Printing, Coating, and Dyeing of Fabrics and Other Textiles.	31321	Broadwoven fabric mills.
	31322	Narrow fabric mills and Schiffli machine embroidery.
	313241	Weft knit fabric mills.
	313311	Broadwoven fabric finishing mills.
	313312	Textile and fabric finishing (except broadwoven fabric) mills.
	313320	Fabric coating mills.
	314110	Carpet and rug mills.
	326220	Rubber and plastics hoses and belting and manufacturing.
	339991	Gasket, packing, and sealing device manufacturing.
Surface Coating of Metal Furniture	337124	Metal Household Furniture Manufacturing.
	337214	Nonwood Office Furniture Manufacturing.
	337127	Institutional Furniture Manufacturing.
	337215	Showcase, Partition, Shelving, and Locker Manufacturing.
	337127	Institutional Furniture Manufacturing.
	332951	Hardware Manufacturing.
	332116	Metal Stamping.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION—Continued

NESHAP Source category	NAICS [1] code	Regulated entities [2]
	332612	Wire Spring Manufacturing.
	337215	Showcase, Partition, Shelving, and Locker Manufacturing.
	335121	Residential Electric Lighting Fixture Manufacturing.
	335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing.
	339111	Laboratory Furniture Manufacturing.
	339114	Dental Equipment Manufacturing.
	337127	Institutional Furniture Manufacturing.
	81142	Reupholstery and Furniture Repair.
	922140	State correctional institutions that apply coatings to metal furniture.

[1] North American Industry Classification System.
[2] Regulated entities means major source facilities that apply surface coatings to these parts or products.
[3] Excluding special industry machinery, industrial and commercial machinery and equipment, and electrical machinery equipment and supplies not elsewhere classified.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source categories listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://www.epa.gov/stationary-sources-air-pollution/printing-coating-and-dyeing-fabrics-and-other-textiles-national#rule-summary, https://www.epa.gov/stationary-sources-air-pollution/surface-coating-large-appliances-national-emission-standards, and https://www.epa.gov/stationary-sources-air-pollution/surface-coating-metal-furniture-national-emission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by May 14, 2019. Under CAA section 307(b)(2), the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including but not limited to those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. *See* CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The

MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for these final rules, *see* 83 **Federal Register** (FR) 46262, September 12, 2018.

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

B. What are the source categories and how does the NESHAP regulate its HAP emissions?

1. What is the Surface Coating of Large Appliances source category and how does the current NESHAP regulate its HAP emissions?

The EPA promulgated the Surface Coating of Large Appliances source category NESHAP on July 23, 2002 (67 FR 48254). The standards are codified at 40 CFR part 63, subpart NNNN. The Surface Coating of Large Appliances industry consists of facilities that are engaged in the surface coating of a large appliance part or product. The source category covered by this MACT standard currently includes ten facilities.

The Surface Coating of Large Appliances NESHAP (40 CFR 63.4081) defines a ''large appliance part or product'' as ''a component of a large appliance product manufactured for household, recreational, institutional, commercial, or industrial use,'' and defines a coating as a ''material that is applied to a substrate for decorative, protective or functional purposes.'' This source category is further described in the September 12, 2018, RTR proposal. *See* 83 FR 46262, 46266–67.

The primary HAP emitted from this source category are organic HAP and include xylene, glycol ethers, toluene, methanol, ethyl benzene, methylene chloride, and methyl isobutyl ether with approximately 80 percent of the HAP emissions coming from coating operations and from the mixing and storage areas. The EPA estimates that HAP emissions are currently about 120 tpy. Most large appliance coating is currently applied either by using a spray gun in a spray booth, by dipping the substrate in a tank of coating, or by powder coating.

The Surface Coating of Large Appliances NESHAP specifies numerical emission limits for organic HAP emissions from surface coating application operations. The organic HAP emission limit for existing sources is 0.13 kilogram (kg) organic HAP/liter (1.1 pound/gallon (lb/gal)) of coating solids and for new or reconstructed sources is 0.022 kg organic HAP/liter (0.18 lb/gal) of coating solids.

The Surface Coating of Large Appliances NESHAP provides three compliance options for existing sources: (1) Compliant coatings, *i.e.,* all coatings have less than or equal to 0.13 kg organic HAP/liter (1.1 lb/gal) of coating solids; (2) emission rate without add-on controls; or (3) emission rate with add-on controls. Facilities using the compliant material option or the emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

2. What is the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category and how does the current NESHAP regulate its HAP emissions?

The EPA promulgated the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP on May 29, 2003 (68 FR 32172). The standards are codified at 40 CFR part 63, subpart OOOO. The Printing, Coating, and Dyeing of Fabrics and Other Textiles industry consists of facilities that are engaged in the printing, coating, slashing, dyeing, or finishing of fabrics and other textiles. The source category covered by this MACT standard currently includes 43 facilities.

The Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP (40 CFR 63.4371) defines a fabric as any woven, knitted, plaited, braided, felted, or non-woven material made of filaments, fibers, or yarns, including thread, and further defines textile as any one of the following: (1) Staple fibers and filaments suitable for conversion to or use as yarns, or for the preparation of woven, knit, or nonwoven fabrics; (2) yarns made from natural or manufactured fibers; (3) fabrics and other manufactured products made from staple fibers and filaments and from yarn; and (4) garments and other articles fabricated from fibers, yarns, or fabrics. The NESHAP also defines a coating material as an elastomer, polymer, or prepolymer material applied as a thin layer to a textile web. This source category is further described in the September 12, 2018, RTR proposal. *See* 83 FR 46264.

The primary HAP emitted from printing, coating, and dyeing operations are organic HAP and include toluene, phenol, methanol, and N,N-dimethylformamide. The majority of organic HAP emissions (greater than 95 percent) come from the coating and printing subcategories, with the remainder coming from dyeing and finishing. The EPA estimates that HAP emissions are currently about 737 tpy.

The Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP specifies numerical emission limits for organic HAP emissions from three subcategories: Printing and coating; dyeing and finishing; and slashing. The

organic HAP emissions limit for existing affected sources is 0.12 kg organic HAP/kg (lb/lb) of coating solids applied, and for new or reconstructed affected sources the emissions limit is 0.08 kg organic HAP/kg (lb/lb) of coating solids applied. Printing or coating-affected sources also may demonstrate compliance by achieving at least a 98-percent HAP reduction for new affected sources or a 97-percent HAP reduction for existing sources. Alternatively, new and existing sources using a thermal oxidizer may demonstrate compliance by achieving a HAP concentration at the oxidizer outlet of no greater than 20 parts per million by volume (ppmv) on a dry basis and having an emission capture system with 100-percent efficiency.

For new, reconstructed, or existing dyeing and finishing operations, the emissions limit for conducting dyeing operations is 0.016 kg organic HAP/kg (lb/lb) dyeing materials applied; the emissions limit for conducting finishing operations is 0.0003 kg organic HAP/kg (lb/lb) finishing materials applied; and the emissions limit for conducting both dyeing and finishing operations is 0.016 kg organic HAP/kg (lb/lb) dyeing and finishing materials applied.

For new, reconstructed, or existing slashing operations, the slashing materials must contain no organic HAP (each organic HAP that is not an Occupational Safety and Health Administration (OSHA)-defined carcinogen that is measured to be present at less than 1 percent by weight is counted as zero).

Facilities using the compliant material option or the emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

3. What is the Surface Coating of Metal Furniture source category and how does the current NESHAP regulate its HAP emissions?

The EPA promulgated the Surface Coating of Metal Furniture NESHAP on May 23, 2003 (68 FR 28606). The standards are codified at 40 CFR part 63, subpart RRRR. The Surface Coating of Metal Furniture industry consists of facilities that engage, either in part or in whole, in the surface coating of metal furniture. The Surface Coating of Metal Furniture NESHAP (40 CFR 63.4881) defines metal furniture as furniture or components of furniture constructed either entirely or partially from metal. The source category covered by this MACT standard currently includes 16 facilities. This source category is further described in the September 12, 2018, RTR proposal. *See* 83 FR 46264.

Most of the organic HAP emissions from metal furniture surface coating operations occur from coating application operations and drying and curing ovens. Xylene, glycol ethers, ethylbenzene, toluene, and cumene account for more than 95 percent of the HAP emitted from the source category. The EPA estimates that HAP emissions are currently about 145 tpy.

The Surface Coating of Metal Furniture NESHAP provides existing sources three compliance options: (1) Use only compliant coatings, *i.e.,* all coatings have less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) of coating solids used; (2) collectively manage the coatings such that the monthly emission rate of organic HAP is less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) coating solids used; or (3) use emission capture systems and control devices to achieve an organic HAP emissions rate of less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) coating solids used.

Facilities using the compliant material option or the emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

C. What changes did we propose for the source categories in our September 12, 2018, RTR proposal?

On September 12, 2018, the EPA published a proposed rule in the **Federal Register** for the Surface Coating of Large Appliances NESHAP; the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP; and the Surface Coating of Metal Furniture NESHAP, 40 CFR part 63, subpart NNNN, 40 CFR part 63, subpart OOOO, and 40 CFR part 63, subpart RRRR, respectively, that took into consideration the RTR analyses.

We proposed to find that the risks from each of the source categories are acceptable, and that additional emission controls for each source category are not necessary to provide an ample margin of safety.

We also proposed the following amendments:

- Pursuant to the technology reviews for the Surface Coating of Large Appliances source category and the Surface Coating of Metal Furniture source category, a requirement that, for each coating operation for which coatings are spray applied, high-efficiency spray equipment must be used if the source is not using the emission rate with add-on control compliance option;
- For each source category, a requirement for electronic submittal of notifications, semi-annual reports, and compliance reports (which include performance test reports);
- For each source category, revisions to the SSM provisions of each NESHAP in order to ensure that they are consistent with the Court decision in *Sierra Club* v. *EPA,* 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted source owners and operators from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM;
- For each source category, adding the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, ''Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,'' to measure and then subtract methane emissions from measured total gaseous organic mass emissions as carbon;
- For each source category, removing references to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200), which dealt with OSHA-defined carcinogens, and replacing that reference with a list of HAP that must be regarded as potentially carcinogenic based on EPA guidelines;
- For each source category, IBR of alternative test methods and references to updated alternative test methods; and
- Several minor editorial and technical changes in each subpart.

In the same notice, we requested comment on the following, although we did not propose actual rule amendments:

- Whether the EPA should change the reporting frequency for all reports submitted to the EPA from semi-annual to annual, for all three source categories;
- Whether, for all three source categories, additional performance testing should be required, with a specific request for comment on a requirement to conduct performance testing any time a source plans to undertake an operational change that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value;
- Whether the Agency should ban the use of ethylene oxide in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category under the technology review;

- Whether the Agency should establish a work practice for sources in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category for periods of malfunction when an immediate line shutdown may not be feasible due to safety concerns, and concerns that an immediate shutdown would result in the unnecessary generation of hazardous waste; and
- The relationship between CAA sections 112(d)(6), technology review, and CAA section 112(f), residual risk review; specifically, the extent to which findings that underlie a CAA section 112(f) determination should be considered in making any determinations under CAA section 112(d)(6).

III. What is included in these final rules?

This action amends and finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for three rules—the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture. This action also finalizes the following changes for each source category:

- A requirement for periodic performance testing of capture and control devices every 5 years;
- A requirement for electronic submittal of notifications, semi-annual reports, and compliance reports (which include performance test reports);
- Revising the SSM provisions of each NESHAP;
- Adding the option to conduct EPA Method 18 of appendix A to 40 CFR part 60, ''Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,'' to measure and then subtract methane emissions from measured total gaseous organic mass emissions as carbon;
- Removing references to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200), which dealt with OSHA-defined carcinogens, and replacing that reference with a list of HAP that must be regarded as potentially carcinogenic based on EPA guidelines;
- IBR of alternative test methods and references to updated alternative test methods and updated appendices; and
- Several minor technical amendments and clarifications of the applicability of the NESHAP and definitions.

A. What are the final rule amendments based on the risk review for the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textile; and Surface Coating of Metal Furniture source categories?

This section describes the final amendments to the Surface Coating of Large Appliances NESHAP (40 CFR part 63, subpart NNNN); the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP (40 CFR part 63, subpart OOOO); and the Surface Coating of Metal Furniture NESHAP (40 CFR part 63, subpart RRRR) being promulgated pursuant to CAA section 112(f). The EPA proposed no changes to these three subparts based on the risk reviews conducted pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from these three subparts are acceptable, and that the standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that causes us to change that proposed determination. Therefore, we are not requiring additional controls under CAA section 112(f)(2) for any of the three subparts in this action.

B. What are the final rule amendments based on the technology review for the source categories?

For 40 CFR part 63, subpart NNNN, 40 CFR part 63, subpart OOOO, and 40 CFR part 63, subpart RRRR, we are not finalizing any revisions to the MACT standards under CAA section 112(d)(6) pursuant to our technology reviews.

C. What are the final rule amendments addressing emissions during periods of SSM?

We are finalizing, as proposed, changes to the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories NESHAP to eliminate the SSM exemption. Consistent with *Sierra Club* v. *EPA* 551 F. 3d 1019 (D.C. Cir. 2008), the EPA is establishing standards in these rules that apply at all times. Table 2 to Subpart NNNN of Part 63, Table 3 to Subpart OOOO of Part 63, and Table 2 to Subpart RRRR of Part 63 (General Provisions applicability table) are being revised to change several references related to requirements that apply during periods of SSM. We eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA also made changes to the rule to remove or modify inappropriate, unnecessary, or redundant language in the absence of the SSM exemption. We determined that facilities in these source categories can meet the applicable emission standards in the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture NESHAP at all times, including periods of startup and shutdown. Therefore, the EPA determined that no additional standards are needed to address emissions during these periods. The legal rationale and detailed changes for SSM periods that we are finalizing today are set forth in the proposed rule. See 83 FR 46284 through 46288, 46295 through 46298, and 46305 through 46308.

We are finalizing a revision to the performance testing requirements at 40 CFR 63.4164, 40 CFR 63.4360, and 40 CFR 63.4963. The final performance testing provisions prohibit performance testing during startup, shutdown, or malfunction as these conditions are not representative of normal operating procedures. The final rules will also require that operators maintain records to document that operating conditions during the test represent normal operations.

D. What other changes have been made to the NESHAP?

These rules also finalize, as proposed, revisions to several other NESHAP requirements. We describe the revisions that apply to all the affected source categories in the following paragraphs.

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing a requirement that owners and operators of facilities in the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture source categories submit electronic copies of certain required performance test reports through the EPA's Central Data Exchange (CDX) website using an electronic performance test report tool called the Electronic Reporting Tool (ERT). We also are finalizing, as proposed, provisions that allow facility operators the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility, *i.e.,* for a possible outage in the CDX or Compliance and Emissions Data Reporting Interface (CEDRI) or for a force majeure event in the time just prior to a report's due date, as well as the process to assert such a claim.

We are finalizing amendments to 40 CFR 63.4166(b), 40 CFR 63.4362(b), and

40 CFR 63.4965(b) to add the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, ''Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,'' to measure and then subtract methane emissions from measured total gaseous organic mass emissions, as carbon, for those facilities using the emission rate with add-on control compliance option and EPA Method 25A to measure control device destruction efficiency. We also are finalizing the format of references to test methods in 40 CFR part 60, appendix A to indicate where, in the eight sections of appendix A, each method is found.

For each subpart, we are finalizing the proposal to remove the reference to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200) and replace with a reference to a new table in each subpart (Table 5 to 40 CFR part 63, subpart NNNN, Table 6 to 40 CFR part 63, subpart OOOO, and Table 5 to 40 CFR part 63, subpart RRRR) that lists the organic HAP that must be included in calculating total organic HAP content of a coating material present at 0.1 percent or greater by mass. We are finalizing the a provision to include organic HAP in these tables if they were categorized in the EPA's ''Prioritized Chronic Dose-Response Values for Screening Risk Assessments'' (dated May 9, 2014) as a ''human carcinogen,'' ''probable human carcinogen,'' or ''possible human carcinogen'' according to ''The Risk Assessment Guidelines of 1986'' (EPA/600/8–87/045, August 1987),[2] or as ''carcinogenic to humans,'' ''likely to be carcinogenic to humans,'' or with ''suggestive evidence of carcinogenic potential'' according to the ''Guidelines for Carcinogen Risk Assessment'' (EPA/630/P–03/001F, March 2005).

We are including in the final rule for each subpart a requirement for facilities to conduct control device performance testing no less frequently than once every 5 years when using the emission rate with add-on controls compliance option. Facilities will be able to conduct these performance tests on the same schedule as their title V operating permit renewals. If the title V permit already requires performance testing, no additional testing will be required.

1. What other changes have been made to the Surface Coating of Large Appliances source category NESHAP?

We are finalizing several miscellaneous technical amendments to improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature sensor referred to in 40 CFR 63.4168(c)(3) for purposes of performing periodic calibration and verification checks;
- Renumbering 40 CFR 63.4130(k)(8) and (9) to be 40 CFR 63.4130(k)(7) and (8) because the current paragraph 40 CFR 63.4130(k) is missing a paragraph (k)(7);
- Revising the rule citation ''§ 63.4130(k)(9)'' in 40 CFR 63.4163(e) to be ''§ 63.4130(k)(8),'' consistent with the proposed renumbering of 40 CFR 63.4130(k)(9) to (k)(8);
- Clarifying that 40 CFR 63.4131(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation; and
- Revising 40 CFR 63.4141(b) and (c) to update ASTM International (ASTM) D1475–90 to ASTM D1475–13, including IBR of the newer version of the method.

We are finalizing corrections to several erroneous rule citations:

- Revising one instance in 40 CFR 63.4160(a)(1) and three instances in 40 CFR 63.4160(b)(1) that an erroneous rule citation ''§ 63.4183'' is specified. Section 63.4183 does not exist in 40 CFR part 63, subpart NNNN, and the corrected citation is ''§ 63.4083'';
- Revising one instance in 40 CFR 63.4110(b)(10) of an erroneous rule citation ''§ 63.4081(d).'' The corrected citation is ''§ 63.4081(e)'';
- Revising one instance in 40 CFR 63.4130(f) and one instance in 40 CFR 63.4130(g) of an erroneous rule citation of ''§ 63.4141(a).'' The corrected citation is ''§ 63.4141'';
- Revising one instance in 40 CFR 63.4168(c)(2) where an erroneous rule citation ''§ 63.6167(b)(1) and (2)'' is specified. The corrected citation is to ''§ 63.4167(b)(1) and (2)'';
- Revising the rule citation for ''§ 63.4120(b)'' specified in the fourth column of the table entry for ''§ 63.10(d)(2).'' The corrected citation is ''§ 63.4120(h)'';
- Revising the rule citation ''§ 63.4120(b)'' specified in the fourth column of the table entry for ''§ 63.10(e)(3).'' The corrected citation is ''§ 63.4120(g)''; and
- Clarifying that 40 CFR 63.4152(c) requires a statement that the source was in compliance with the emission limitations during the reporting period applies only if there were no deviations from the emission limitations.

The above clarifications and corrections were proposed in the September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

2. What other changes have been made to the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category NESHAP?

We are finalizing the proposal to amend 40 CFR 63.4350(a)(3) and (b)(3); and 40 CFR 63.4351(a) and (e) to correct the references to the alternative control device outlet organic HAP concentration limit from 20 parts per million by weight to 20 ppmv.

In addition, we are finalizing several miscellaneous technical amendments to improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature indicator referred to in 40 CFR 63.4364(c) for purposes of performing periodic calibration and verification checks;
- Clarifying that 40 CFR 63.4313(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation;
- Amending a reporting requirement in 40 CFR 63.4342(f) to harmonize the requirement with the same reporting requirement in 40 CFR 63.4311(a)(4) that requires the same statement to be reported if ''there were no deviations from the emission limitations in §§ 63.4290, 63.4292, and 63.4293'';
- Revising one instance in 40 CFR 63.4311(a)(7)(i)(B) to add a reference for an equation that is missing by adding ''6'' to the list of equations cited in 40 CFR 63.4311(a)(7)(i)(B) so that the citation reads ''Equations 4, 4A, 5, 6, and 7 of § 63.4331'';
- Revising one instance in 40 CFR 63.4340(b)(3) in which an erroneous rule citation to ''§ 63.4561'' is corrected to ''§ 63.4341''; and
- Correcting Table 3 to 40 CFR part 63, subpart OOOO in the fourth column of the table entry for ''§ 63.8(g)(1)–(5)'' that erroneously refers to ''sections 63.4342 and 63.4352.'' The correct reference is ''Sections 63.4363 and 63.4364.''

The above clarifications and corrections were proposed in the

[2] *See https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants.*

September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

3. What other changes have been made to the Surface Coating of Metal Furniture source category NESHAP?

We are finalizing several proposed miscellaneous technical amendments to improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature sensor referred to in 40 CFR 63.4967(c)(3) for purposes of performing periodic calibration and verification checks;
- Clarifying that 40 CFR 63.4931(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation;
- Revising the second sentence of 40 CFR 63.4920(a)(4) to correct an erroneous reference to ''the emission limitations in § 63.4890.'' The correct reference is to the applicable emission limitations in 40 CFR 63.4890, 63.4892, and 63.489;
- Changing ''emission limitations'' in the first sentence of 40 CFR 63.4920(a)(4) to ''emission limits'';
- Revising 40 CFR 63.4941(c) to update ASTM D1475–90 to ASTM D1475–13, including IBR of the newer version of the method;
- Revising 40 CFR 63.4951(c) to remove repetition with the cross-referenced 40 CFR 63.4941(c); and
- Correcting Table 2 to 40 CFR part 63, subpart RRRR in the fourth column of the table entry for ''§ 63.10(e)(3)'' for an erroneous rule citation of ''§ 63.4920(b).'' The correct rule citation is ''§ 63.4920(a).''

The above clarifications and corrections were proposed in the September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

E. What are the effective and compliance dates of the standards?

The effective date of all three final rules is March 15, 2019. We are finalizing two changes that would impact ongoing compliance requirements for each of these three subparts. We are adding a requirement that notifications, performance test results, and semiannual compliance reports be submitted electronically using the new template for each subpart that was included in the docket for each proposed rule. We are also changing the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. From our assessment of the timeframe needed for implementing the entirety of the revised requirements, the EPA proposed a period of 180 days to be the most expeditious compliance period practicable. No comments were received during the public comment period and the 180-day period is being finalized as proposed. Thus, the compliance date of the final amendments for all affected sources will be September 11, 2019.

F. What are the requirements for submission of performance test data to the EPA?

As proposed, the EPA is taking a step to increase the ease and efficiency of data submittal and data accessibility. Specifically, the EPA is finalizing the requirement for owners and operators of facilities in the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories to submit electronic copies of certain required performance test reports.

Data will be collected by direct computer-to-computer electronic transfer using EPA-provided software. This EPA-provided software is an electronic performance test report tool called the ERT (Electronic Reporting Tool). The ERT will generate an electronic report package which will be submitted to CEDRI, and then archived to the EPA's CDX. A description of the ERT and instructions for using ERT can be found at *https://www3.epa.gov/ttn/chief/ert/index.html.* CEDRI can be accessed through the CDX website (*https://cdx.epa.gov/*).

The requirement to submit performance test data electronically to the EPA does not create any additional performance testing and will apply only to those performance tests conducted using test methods that are supported by the ERT. A listing of the pollutants and test methods supported by the ERT is available at the ERT website. Through this approach, industry will save time in the performance test submittal process. Additionally, this rulemaking will benefit industry by reducing recordkeeping costs, as the performance test reports that are submitted to the EPA using CEDRI are no longer required to be kept in hard copy.

State, local, and tribal agencies may benefit from a more streamlined and accurate review of performance test data that will become available to the public through WebFIRE. Having such data publicly available enhances transparency and accountability. For a more thorough discussion of electronic reporting of performance tests using direct computer-to-computer electronic transfer and using EPA-provided software, *see* the discussion in the preamble of the proposal.

In summary, in addition to supporting regulation development, control strategy development, and other air pollution control activities, having an electronic database populated with performance test data will save industry, state, local, tribal agencies, and the EPA significant time, money, and effort while improving the quality of emission inventories and air quality regulations.

IV. What is the rationale for our final decisions and amendments for these three surface coating source categories?

A. Residual Risk Reviews

1. What did we propose pursuant to CAA section 112(f)?

a. Surface Coating of Large Appliances (40 CFR part 63, Subpart NNNN) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart NNNN (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 2 of this preamble. More detail is in the residual risk technical support document, ''Residual Risk Assessment for the Surface Coating of Large Appliances Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule,'' available in the docket for this rulemaking.

TABLE 2—SURFACE COATING OF LARGE APPLIANCES SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 Million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer TOSHI [1]		Maximum screening acute noncancer HQ [2]
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions
Source Category	0.9	1	0	50	0.0001	0.0002	0.07	0.08	HQREL = 2
Whole Facility	6		600		0.0002		0.2		

[1] The target organ-specific hazard index (TOSHI) is the sum of the chronic noncancer hazard quotients (HQ) values for substances that affect the same target organ or organ system.

[2] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values (HQREL = hazard quotient recommended exposure level).

The results of the proposal inhalation risk modeling using actual emissions data, as shown in Table 2 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 0.9-in-1 million, the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.07, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 2 (driven by glycol ethers). At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.0001 excess cancer cases per year, or one case in every 10,000 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 2 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 1-in-1 million, and the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.08. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.0002 excess cancer cases per year, or one case in every 5,000 years.

The maximum whole-facility cancer maximum individual risk (MIR) was determined to be 6-in-1 million at proposal, driven by chromium (VI) compounds from a cleaning/pretreatment operation. At proposal, the total estimated cancer incidence from whole facility emissions was determined to be 0.0002 excess cancer cases per year, or one excess case in every 5,000 years. Approximately 600 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources at the 10 facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.2, driven by emissions of methylene diphenyl diisocyanate from foam produced as part of plastic products manufacturing.

There are no persistent and bioaccumulative HAP (PB HAP) emitted by facilities in this source category. Therefore, we did not estimate any human health multi-pathway risks from this source category. Two environmental HAP are emitted by sources within this source category: Hydrogen chloride (HCl) and hydrogen flouride (HF). Therefore, at proposal we conducted a screening-level evaluation of the potential adverse environmental risks associated with emissions of HCl and HF. Based on this evaluation, we proposed that we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 2 of this preamble, in our risk acceptability determination and proposed that the residual risks from the Surface Coating of Large Appliances source category are acceptable (section IV.A.2.a of proposal preamble, 83 FR 46279, September 12, 2018).

We then considered whether 40 CFR part 63, subpart NNNN provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category.

As discussed further in section III.B. of this preamble, the only development identified in the technology review was the use of high-efficiency spray equipment. We estimated no changes in costs or emissions would occur due to switching to high-efficiency application methods for this source category, because we expected that large appliance surface coating facilities already are using high-efficiency coating application methods due to state volatile organic compound (VOC) rules and the economic incentives of using more efficient application methods. Because quantifiable reductions in risk are unlikely, we proposed that additional emissions controls for this source category are not necessary to provide an ample margin of safety (section IV.A.2.b. of proposal preamble, 83 FR 46279, September 12, 2018).

b. Printing, Coating, and Dyeing of Fabrics and Other Textiles (40 CFR Part 63, Subpart OOOO) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart OOOO (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 3 of this preamble. More detail is in the residual risk technical support document, ''Residual Risk Assessment for the Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule,'' available in the docket for this rulemaking.

TABLE 3—PRINTING, COATING, AND DYEING OF FABRICS AND OTHER TEXTILES SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer TOSHI [1]		Maximum screening acute noncancer HQ [2]
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions
Source Category	9	10	8,500	10,000	0.002	0.002	0.3	0.3	HQREL = 0.6
Whole Facility	9	.....	12,200	.....	0.003	.....	0.3	.....	

[1] The target organ-specific hazard index (TOSHI) is the sum of the chronic noncancer hazard quotient (HQ) values for substances that affect the same target organ or organ system.

[2] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values (HQREL = hazard quotient recommended exposure level).

The results of the proposal inhalation risk modeling using actual emissions data, as shown in Table 3 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 9-in-1 million (driven by ethylene oxide), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.3, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 0.6. At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.002 excess cancer cases per year, or one case in every 500 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 3 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 10-in-1 million (driven by ethylene oxide), the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.3. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.002 excess cancer cases per year, or one case in every 500 years.

The maximum facility-wide cancer MIR was 9-in-1 million at proposal, driven by ethylene oxide from fabric finishing. The results of our facility-wide assessment at proposal indicated that 12 facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. At proposal the total estimated cancer incidence from whole facility emissions was determined to be 0.003 excess cancer cases per year, or one excess case in every 330 years. Approximately 12,200 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources collocated at the 43 facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.3, driven by emissions of trichloroethylene from adhesive application.

There are no PB–HAP emitted by facilities in this source category. Therefore, we did not estimate any human health multi-pathway risks from this source category. Environmental HAP are not emitted by sources within this source category; therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 3 of this preamble, in our risk acceptability determination, and proposed that the residual risks from the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category are acceptable (section IV.B.2.a of proposal preamble, 83 FR 46292, September 12, 2018).

We then considered whether 40 CFR part 63, subpart OOOO provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category.

Based on our review, we did not identify any developments in add-on control technologies, other equipment or work practices and procedures since the promulgation of the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP. We note, however, that the only facility that previously reported ethylene oxide emissions no longer emits this HAP as a result of a process change. Therefore, we proposed that additional emissions controls for this source category are not necessary to provide an ample margin of safety (section IV.B.2.b. of proposal preamble, 83 FR 46293, September 12, 2018). However, we solicited comment on whether the Agency should ban the use of ethylene oxide in this source category under the technology review (section VI of proposal preamble, 83 FR 46313, September 12, 2018). Our response to these comments and rationale for our final decision are found in section IV.B of this preamble.

c. Surface Coating of Metal Furniture (40 CFR Part 63, Subpart RRRR) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart RRRR (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 4 of this preamble. More detail is in the residual risk technical support document, ''Residual Risk Assessment for the Surface Coating of Metal Furniture Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule,'' available in the docket for this rulemaking.

TABLE 4—SURFACE COATING OF METAL FURNITURE SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer TOSHI [1]		Maximum screening acute noncancer HQ [2]
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions
Source Category	7	10	2,100	4,200	0.0004	0.0008	0.2	0.3	HQREL = 2
Whole Facility	7	.....	2,200	.....	0.0005	.....	0.1	.....	

[1] The TOSHI is the sum of the chronic noncancer HQ values for substances that affect the same target organ or organ system.
[2] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values (HQREL = hazard quotient recommended exposure level).

The results of the proposal inhalation risk modeling using actual emissions data, as shown in Table 4 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 7-in-1 million (driven by ethyl benzene), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.2, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 2 (driven by glycol ethers). At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.0004 excess cancer cases per year, or one case in every 2,500 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 4 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 10-in-1 million (driven by ethyl benzene), the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.3. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.0008 excess cancer cases per year, or one case in every 1,250 years.

The maximum facility-wide cancer MIR was 7-in-1 million at proposal, driven by ethyl benzene. Four facilities had a facility-wide cancer MIR greater than or equal to 1-in-1 million. At proposal, the total cancer incidence from whole facility emissions was estimated to be 0.0005 excess cancer cases per year, or one excess case in every 2,000 years. Approximately 2,200 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources at the 16 facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.1.

There are no PB–HAP emitted by facilities in this source category. Therefore, we did not estimate any human health multi-pathway risks from this source category. Environmental HAP are not emitted by sources within this source category; therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 4 of this preamble, in our risk acceptability determination, and proposed that the residual risks from the Surface Coating of Metal Furniture source category are acceptable (section IV.C.2.a of proposal preamble, 83 FR 46301, September 12, 2018).

We then considered whether 40 CFR part 63, subpart RRRR provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category.

As discussed in detail in section III.B of this preamble, the only development identified in the technology review was the use of high-efficiency spray equipment. We estimated no changes in costs or emissions reductions would occur due to switching to high-efficiency application methods for this source category because we expected that metal furniture surface coating facilities were already using high-efficiency coating application methods due to state VOC rules and the economic incentives of using these more efficient application methods. Because quantifiable reductions in risk are unlikely, we proposed that additional emissions controls for this source category were not necessary to provide an ample margin of safety (section IV.C.2.b. of proposal preamble, 83 FR 46302, September 12, 2018).

2. How did the risk review change?

We have not changed any aspect of the risk assessment since the September 2018 proposal for any of the three source categories.

3. What key comments did we receive on the risk reviews, and what are our responses?

We received comments in support of and against the proposed residual risk review and our determination that no revisions were warranted under CAA section 112(f)(2) for all three source categories. Generally, the comments that were not supportive of the determination from the risk reviews suggested changes to the underlying risk assessment methodology. For example, some commenters stated that the EPA should lower the acceptability benchmark so that risks below 100-in-1 million are unacceptable, include emissions outside of the source categories in question in the risk assessment, and assume that pollutants with noncancer health risks have no safe level of exposure. After review of all the comments received, we determined that no changes were necessary. The comments and our specific responses can be found in the document, ''Summary of Public Comments and Responses for the Risk and Technology Reviews for Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture,'' available in the dockets for these actions (Docket ID Nos. EPA–HQ–OAR–2017–0668, EPA–HQ–OAR–2017–0669, and EPA–HQ–OAR–2017–0670).

4. What is the rationale for our final approach and final decisions for the risk reviews?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using ''a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of ''approximately 1-in-10 thousand'' (*see* 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum cancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed. For the reasons explained in the proposed rule, we determined that the risks from each of these three source categories are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, we are not revising any of these three subparts to require additional controls pursuant to CAA section 112(f)(2) based on the residual risk review, and we are readopting the existing standards under CAA section 112(f)(2).

B. Technology Reviews

1. What did we propose pursuant to CAA section 112(d)(6)?

The Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP do not contain any standards specifying the type of spray application equipment that must be used when coatings are spray applied. Sources subject to the Printing, Coating, and Dyeing of Fabric and Other Textiles NESHAP do not spray apply coatings. However, many facilities complying with these NESHAP also are required by state VOC regulations to use high-efficiency spray guns for coatings that are spray applied. We expected that other large appliance surface coating and metal furniture surface coating facilities in other states are also using high-efficiency application equipment for spray-applied coatings to reduce coating and spray booth filter consumption and to reduce the amount of solid waste generated in the form of used spray booth filters. Although we expected that switching to high-efficiency spray application equipment would have lower costs at facilities not already using it, we are uncertain of other factors that facilities may need to consider if choosing to switch to high-efficiency application equipment.

Based on these findings, we proposed to revise the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP for coating application operations pursuant to CAA section 112(d)(6) to require that, for each coating operation for which coatings are spray applied, high-efficiency spray equipment must be used if the source is not using the emission rate with add-on control compliance option. Specifically, all spray-applied coating operations, where the source is not using the emission rate with add-on control compliance option, would have been required to achieve transfer efficiency equivalent to or better than 65 percent. At proposal four types of high-efficiency spray equipment technologies were identified that the EPA believed could achieve transfer efficiency equivalent to or better than 65 percent, including high volume, low pressure (HVLP) spray equipment; electrostatic application; airless spray equipment; and air-assisted airless spray equipment. Alternative spray equipment technologies would have had to provide documentation demonstrating at least 65-percent transfer efficiency. Spray application equipment sources using alternative spray application equipment technologies other than the four listed would have had to follow procedures in the California South Coast Air Quality Management District's, ''Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989,'' to demonstrate that their spray application equipment is capable of achieving transfer efficiency equivalent to, or better than, 65 percent. Equivalency documentation would have been certified by manufacturers of the spray equipment, on behalf of facilities using spray-applied coatings, by following the aforementioned procedure in conjunction with California South Coast Air Quality Management District's, ''Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002.'' We proposed that all spray equipment used for spray-applied coating operations be required to be operated according to company procedures, local specified operating procedures, or the manufacturer's specifications, whichever achieved 65-percent transfer efficiency. Further, we proposed related definitions for ''airless and air-assisted airless spray,'' ''electrostatic application,'' ''high-volume, low-pressure (HVLP) spray equipment,'' ''spray-applied coating operations,'' ''and transfer efficiency.''

For the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, we identified one potential development in technology: A process change that eliminated the use of ethylene oxide at one facility. In our residual risk analysis for this source category, we estimated the maximum facility-wide cancer MIR to be 9-in-1 million, driven by ethylene oxide emissions from fabric finishing at one facility. During a site visit to the facility that reported ethylene oxide emissions in the National Emission Inventory, we learned that the ethylene oxide emissions were overstated by the facility. The facility confirmed that it no longer uses the ethylene oxide-containing material due to cost. We noted this was the only facility that reported ethylene oxide emissions, and we concluded that ethylene oxide-containing materials are no longer used in the industry, based on our information. We solicited comment on whether the Agency should ban the use of ethylene oxide in this source category under the technology review.

We also solicited comment on the relationship between the CAA section 112(d)(6) technology review and the CAA section 112(f) risk review. We solicited comment on whether revisions to the NESHAP are ''necessary,'' as the term is used in CAA section 112(d)(6), in situations where the EPA has determined that CAA section 112(d) standards evaluated pursuant to CAA section 112(f) provide an ample margin of safety to protect public health and prevent an adverse environmental effect. In other words, we solicited comment on whether it is ''necessary'' to revise the standards based on developments in technologies, practices, or processes under CAA section 112(d)(6) if remaining risks associated with air emissions from a source category have already been reduced to levels that provide an ample margin of safety under CAA section 112(f). *See* CAA section 112(d)(6) (''The Administrator shall review, and revise as necessary . . .''). We also solicited comment on whether further revisions under CAA section 112(d)(6) would be necessary if the CAA section 112(f) ample margin of safety analysis shows lifetime excess cancer risks to the individual most exposed to emissions from a source in the category is less than 1-in-1 million or if other, either higher

or lower, cancer risk levels would be appropriate to consider if they assured an ample margin of safety.

2. How did the technology review change?

We are not finalizing the proposal to require the use of high-efficiency application equipment for spray-applied coatings in the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP.

We solicited comment on the potential process change that eliminated the use of ethylene oxide at one facility, but did not propose this requirement for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category. Based on the comments we received, we are making no changes as a result of the technology review to the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP.

3. What key comments did we receive on the technology reviews, and what are our responses?

Comment: One commenter supported the EPA's proposal to require Large Appliances and Metal Furniture facilities to use high-efficiency spray equipment as a technology development under CAA section 112(d)(6). However, the commenter disagreed with the EPA's conclusion that all or most sources are likely using high-efficiency spray equipment. They argued that the EPA provided no evidence there would be no emission reduction, and argued that the proposed requirement would prevent emission increases in the future if economic incentives or state rules currently encouraging the use of high-efficiency spray equipment change.

Another commenter objected to the proposed language that all ''spray application equipment must be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times.'' The commenter argued that it was unclear how facilities would ensure the equipment is operated according to the more stringent approach so as to avoid having a potential permit deviation/violation even though they may still be complying with the underlying numerical emission standard.

Response: The EPA has determined not to finalize the proposed requirement for all sources to use high-efficiency spray application technology that has a transfer efficiency of at least 65 percent because we believe our assumptions at proposal may not be appropriate for all coating-related processes in the metal furniture and large appliances source categories. We do not have sufficient data at this time to determine if the high-efficiency spray application technology requirement is reasonable from a technological perspective.

At proposal, a critical assumption we made was that the four high-efficiency spray equipment technologies required in the proposed rulemaking (HVLP, electrostatic application, airless and air assisted airless spray equipment) would achieve at least 65-percent transfer efficiency when used by all facilities in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories. New information, however, leads us to conclude that the transfer efficiency of the proposed high-efficiency spray application technologies may be less than 65 percent, as it is dependent on parameters such as part size, part shape, distance of the spray gun from the parts, atomizing air pressure, fluid pressure, painting technique, type of coating, viscosity of the coating, and more. Generally, the smaller and narrower the part being coated, the lower the transfer efficiency. Conversely, the larger and wider the part being painted, the higher the transfer efficiency. Therefore, transfer efficiency varies greatly source category-by-source category. In both the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories, parts are of various shapes and sizes; therefore, transfer efficiency using high-efficiency spray application technologies could be lower than the 65-percent transfer efficiency requirement in the proposed rule, depending on the size and shape of the parts being coated.

Additionally, we did not receive any data that would allow us to determine the actual average transfer efficiency of the spray application technologies we identified in the proposed rule. In light of this uncertainty, we conclude it would be difficult, if not impossible, to determine at this time the appropriate high-efficiency spray application technologies or transfer efficiency to require. Absent more data and information, we are not able to adequately estimate the technical feasibility of the proposed 65-percent transfer efficiency requirement for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories.

The situation for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories is different from other rules where we have required use of high-efficiency spray application. For example, the high-efficiency spray application requirements in the Aerospace Manufacturing and Rework Operations NESHAP were based on available data that allowed us to estimate the technological feasibility of the requirements. Absent similar data for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories, we believe it is not reasonable to require the use of the high-efficiency spray application technologies proposed pursuant to CAA section 112(d)(6) at this time. The EPA, in the future, may be able to determine the technological capabilities of high-efficiency spray application equipment for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories and revisit the need to require such spray application equipment when we have sufficient data and information.

Finally, as noted in the proposed rule, we believe that most, if not all, sources in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories are already using the types of spray application technologies in the proposed rule pursuant to state requirements. We believe that sources will continue to use these technologies, even if it is not required in this final rule, because of the lower coating consumption and waste disposal costs. Nothing in the record supports the comments that states may remove these existing spray application technology requirements from current regulations. We do not expect sources to change from high-efficiency spray technology to lower-efficiency spray equipment, even if state requirements changed, unless there was a specific application that did not work with high-efficiency spray technology. In those cases, the limits on the HAP content of coatings would still apply. We do not think it is reasonable to assume sources would choose higher the coating and waste disposal costs associated with non-high-efficiency spray technology and incur the costs to switch back to non-high-efficiency spray technology, even if state requirements were removed.

For all these reasons, we are not finalizing the proposed requirement for sources in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories to use high-efficiency spray application equipment.

Comment: One commenter argued that the EPA should revise the Coating, Printing, and Dyeing of Fabric and Other Textiles NESHAP to ban the use of ethylene oxide. The commenter argued that failing to ban the use of ethylene oxide would allow facilities to

begin using and emitting this chemical in the future.

Two commenters argued that they saw no justification or rationale to support a ban on the use of ethylene oxide in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category because the decision by one company to stop using materials containing ethylene oxide based on cost did not represent a development in new control technologies, processes, or practices that could be deemed applicable and achievable by the rest of the source category. One of the commenters argued that, unlike technology changes where efficiency gains, emissions reductions, and similar advances are not easily reversed, market forces frequently change the business justification for and against using particular products.

The two commenters argued that the record reflects only a decision by one company based on a set of factors that may be applicable to only that one company and does not provide the statement of basis and purpose required by CAA section 307(d)(3). The commenters argued that additional information and data would be needed on potential costs and emissions reductions and stated that the EPA has not shown whether similar reductions are achievable across the source category. They argued that this information would need to be available for public review and comment. Otherwise, the EPA's proposal would be arbitrary and capricious.

Response: We received no additional information from other facilities in the Printing, Coating, and Dyeing of Fabric and Other Textiles source category on whether they use materials containing ethylene oxide. In addition, we cannot determine whether one facility's decision to stop using the material containing ethylene oxide as a cost savings measure demonstrates that all applications of ethylene oxide should be foreclosed as a development in technology. If sources in this category were to later determine that materials with ethylene oxide are necessary for a particular application, the sources would still be required to comply with the NESHAP limits on the HAP content of materials or HAP emissions for sources using add-on controls. Therefore, total HAP emissions are unlikely to increase even if sources were to start using ethylene oxide containing materials. Under these circumstances, we have determined it is not reasonable to conclude that ethylene oxide containing coatings should be prohibited for use by all sources in the category as an advancement in technology. Finally, we cannot determine whether finalizing a ban on the use of materials containing ethylene oxide would reduce HAP from the source category or otherwise achieve any environmental or risk reduction benefits. For these reasons, we are not finalizing a ban on the use of materials containing ethylene oxide.

Comment: We received several substantive and extensive comments in response to our request for comments on the relationship between the technology review conducted under CAA section 112(d)(6) and the risk analysis under CAA section 112(f)(2) and whether it is necessary for the EPA to amend rules based on CAA section 112(d) to reflect the results of the CAA section 112(d)(6) technology review if the results of the risk analysis under CAA section 112(f)(2) show that the current rule provides an ample margin of safety and no adverse environmental effect. One commenter argued that the EPA must complete the technology review and propose standards based on the findings of that review, regardless of the results of the risk analysis. Other commenters argued that the results of the risk analysis should be considered in the ''necessity'' determination that should be completed in the process of deciding whether to amend a subpart as a result of the technology review.

Response: The EPA is not taking final action on the proposed interpretation discussed in this comment. Instead, the EPA has determined for the reasons described in this notice not to implement the proposed amendments to 40 CFR part 63, subparts NNNN, OOOO, or RRRR based on our technology review. As we are not relying on the proposed interpretation in our final action, we are not addressing the comments we received regarding the relationship between the technology review conducted under CAA section 112(d)(6) and the risk analysis under CAA section 112(f)(2).

4. What is the rationale for our final approach for the technology reviews?

As noted above, we are not finalizing the proposed requirement to use high-efficiency spray application equipment with a 65-percent or better transfer efficiency. We received no information in response to our request for comment on whether any facilities in this source category do not currently use high-efficiency spray application methods, so it is unclear whether the proposed requirement is achievable for all sources in the category. We also received information indicating that the four types of high-efficiency spray application equipment described in our proposed rule do not always achieve the 65-percent transfer efficiency that we proposed to require for high-efficiency spray equipment.

We are not including in the final rule amendments for the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP any requirements to ban the use of ethylene oxide in this source category. We received no additional information from other facilities on whether they use materials containing ethylene oxide, so we cannot determine whether a ban would achieve any environmental or risk reduction benefits.

C. Ongoing Emissions Compliance Demonstrations

1. What did we propose?

The EPA requested comment for all three source categories on whether additional performance testing should be required for any source using the add-on control option based on information from pollution control manufacturers indicating that periodic performance tests are necessary to ensure HAP removal efficiency for the controls is maintained over time. *See* Proposed Rule, 83 FR 46289. We specifically requested comment on whether we should require performance testing for a source that is planning to undertake an operational change that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value. Any such requirement would have included provisions to allow a source to make the change, but it would have limited the change to a specific time before a test is required. We anticipated that a reasonable time limit under the new operations change would be approximately 30 days to allow adequate time for testing and developing a test report. The source would submit temperature and flow rate data during the test to establish new operating parameters, including the time a source would be allowed to operate under the new parameters before the test is performed, and what would constitute an operational change requiring testing.

This approach on which we requested comment could have also allowed an exception from periodic testing for facilities using instruments to continuously measure actual emissions, such as continuous emission monitoring systems (CEMS). Use of CEMS to demonstrate compliance would obviate the need for periodic oxidizer testing.

2. What changed since proposal?

In the final rule amendments for each subpart, the EPA is requiring performance testing of control devices at least every 5 years for facilities complying with the emission rate with add-on controls compliance option. The EPA solicited comment on the need for additional performance testing in the proposed rule (*see* sections IV.A.4.d, IV.B.4.d, and IV.C.4.d of the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews, 83 FR 46289, 46299, and 46309, September 12, 2018).

3. What key comments did we receive and what are our responses?

Comment: One commenter did not support the requirement to complete additional add-on control performance testing after operational changes that may adversely affect compliance because the EPA did not define the operational changes that would trigger the need for performance testing. The commenter argued that the EPA did not define the anticipated costs, burdens, and benefits associated with this testing. The commenter also argued that the suggested 30-day period for testing and development of a test report is too short. The commenter recommended a period of at least 180 days to allow time to hire a testing contractor, to achieve stable (representative) operating conditions before the test, and to allow time for the contractor to prepare the report.

Another commenter supported the testing requirement after a process change that could affect compliance with an emission limit and noted that it was a common feature of MACT rules. The commenter suggested that examples of a process change could include venting additional equipment to the control device, an increase in line speeds, an increase in coating materials used, or use of new coating materials. However, the commenter also suggested that the 30-day timeframe to perform a test after a process change does not seem adequate to allow a facility time to schedule an outside contractor to perform the required testing, test report preparation, review by responsible official, and submission of results. The commenter recommended a 60-day or 90-day timeframe as more appropriate.

Response: The EPA is not finalizing a requirement to require add-on control performance testing after operational changes that may adversely affect compliance. The EPA acknowledges the difficultly in defining operational changes for each source category that would trigger the need for performance testing, as the EPA proposed. However, as described in the preamble to the proposed rules, the EPA recognizes the need for periodic performance testing after the initial performance test to measure the organic HAP destruction or removal efficiency of the add-on control device, or to measure the control device outlet concentration of organic HAP. As stated in the proposed rule, pollution control manufacturers maintain that additional performance testing is needed to ensure the control devices are operating properly. Continuous compliance with the standards when a facility is using the emission rate with add-on control or the control device outlet concentration compliance options that are included in each of these three subparts depends on the proper functioning of the control device.

Periodic performance tests require the measurement of the control devices' actual destruction efficiency or the actual outlet concentration of organic HAP, depending on the compliance option chosen, in order to reaffirm or reestablish the control devices' operating limits. Periodic performance tests help identify potential degradation of the add-on control device over time and ensure the control device remains effective, reducing the potential for acute emissions episodes or non-compliance. As stated in the proposed rule, many facilities using add-on controls to demonstrate compliance with the NESHAP emission limits are currently required to conduct performance tests as a condition for renewing their title V operating permit, which is required every 5 years. Also, specifying a specific performance test interval addresses the uncertainty of when tests would be required was raised by the commenters.

Therefore, the EPA is including in the final rule for each subpart a requirement that each facility using the emission rate with add-on control compliance option or the control device outlet concentration compliance option must complete a performance test of the add-on control device no less frequently than every 5 years. This approach will balance the need to ensure ongoing compliance against providing objective criteria for when performance testing must be completed.

The periodic testing requirement is being added to each subpart but is not estimated to impose any costs on the Surface Coating of Large Appliances or Surface Coating of Metal Furniture sources categories. No facilities in the Surface Coating of Metal Furniture source category are known to be using the emission rate with add-on controls compliance option. One facility in the Surface Coating of Large Appliances source category is using the emission rate with the add-on controls compliance option, but already is required to conduct performance testing every 5 years as a condition of renewing their title V operating permit. In the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, we have identified 13 facilities using 18 control devices that are not currently required to perform testing as a condition of renewing their title V operating permits. We estimate that performance testing will cost approximately $19,000 per control device once every 5 years. The annualized cost will be about $4,400 per control device.

One environmental benefit of periodic performance testing is expected to be in the form of reduced excess emissions from sources using add-on controls, even though facilities are required to be in compliance at all times, and the overall costs and benefits of a NESHAP are calculated based on the assumption that facilities are in compliance. However, this benefit cannot be quantified because our data are not sufficient to estimate the frequency of sources using add-on control devices failing to meet the emission standards, and the magnitude of the excess emissions. If, for example, the standard has a requirement for 98-percent control (*e.g.,* for new or reconstructed coating and printing affected sources under 40 CFR part 63, subpart OOOO), and the device is achieving only 96-percent, emissions are twice what they would be if the device was meeting the standard. This potential for significant increases in HAP from poor performing controls further supports the requirement to conduct periodic testing every 5 years.

4. What is the rational for our final approach?

For the reasons explained in the preamble to the proposed rules (83 FR 46262, September 12, 2018) and in the comment responses above in section IV.C.3 of this preamble, we are finalizing requirements in each of these three subparts to require add-on control performance testing no less frequently than once every 5 years.

D. Work Practice During Periods of Malfunction

1. What did we propose?

The EPA requested comment on the need to establish a standard during periods of malfunction of a control device or a capture system that is used to meet the emission limits for the

Printing, Coating, and Dyeing of Fabrics and Other Textiles source category and asked for specific information to support such a standard. We solicited information from industry on best practices and the best level of emission control during malfunction events for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category. We solicited information on the potential cost savings associated with these practices. We solicited specific supporting data on organic HAP emissions during malfunction events for this category, including the cause of malfunction, the frequency of malfunction, duration of malfunction, and the estimate of organic HAP emitted during each malfunction. We also asked specifically for comment on the use of CEMS by facilities in this source category as a method to better quantify organic HAP emissions during malfunctions and normal operation. We also requested comment on two alternative work practices: (1) During a malfunction, the facility must discontinue the coating operation, but can continue the oven curing of any coating materials already applied onto the web without the control device for the period of the malfunction so long as it continues to meet the emission limits for the current compliance period; or (2) during a malfunction, the facility could initiate repairs immediately and complete them as expeditiously as possible, without ceasing operations, until it becomes apparent that the repairs will not be completed before exceeding the 12-month rolling average compliance limit. Neither alternative provided an opportunity to exceed the emissions limit. (*See* section IV.B.4.b of the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews, 83 FR 46295, September 12, 2018).

2. What changed since proposal?

The EPA is not providing a work practice standard for periods of malfunction of a control device or a capture system for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category in the final rule amendments.

3. What key comments did we receive and what are our responses?

Comment: One commenter supported the work practice standard that would apply during malfunctions of any control device or capture system used by a web coating line, described as alternative 1 in the proposal preamble, and requested that the EPA develop a malfunction alternative that balances the generation of waste (from inadequate drying; cured coatings in lines and guns; and generation of waste coatings) and/or worker safety with exceeding emission limits. However, the commenter did not provide any supporting data or information in response to the EPA's specific solicitation in the proposal preamble.

Another commenter did not support a work practice standard and noted that it was unlawful to add a malfunction exemption or set a so-called malfunction-based standard for any source category, including the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, because, among other arguments, emission standards must be ''continuous.'' A complete summary of the comments received on the EPA's proposal is included in the docket for this rulemaking.

Response: The EPA is not finalizing a separate standard for periods of malfunction, although the EPA may establish a standard for periods of malfunction if the available information supports a separate standard in the future. In this case, we requested comment and information to support the development of a work practice standard during periods of malfunction, but we did not receive sufficient information, including additional quantitative emissions data, on which to base a standard for periods of malfunction. Absent sufficient information, it is not reasonable at this time to establish a work practice standard for this source category. We will continue to review this issue to determine if any new data become available in the future.

4. What is the rational for our final approach?

We are not finalizing a separate standard for periods of malfunction for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, because we did not receive sufficient information on which to base a standard for periods of malfunction.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

We estimate that the 10 major sources subject to the Surface Coating of Large Appliances NESHAP, the 43 major sources subject to the Printing, Coating and Dyeing of Fabrics and Other Textiles NESHAP, and the 16 major sources subject to the Surface Coating of Metal Furniture NESHAP are operating in the United States and will be affected by these final rules.

B. What are the air quality impacts?

We are not establishing new emission limits and are not requiring additional controls; therefore, no air quality impacts are expected as a result of the final amendments to the rule. Requiring periodic performance testing has the potential to reduce excess emissions from sources using poorly performing add-on controls, even though facilities are required to be in compliance at all times.

The final amendments will have no effect on the energy needs of the affected facilities in any of the three source categories, and would, therefore, have no indirect or secondary air emissions impacts.

C. What are the cost impacts?

We estimate that each facility in the three source categories will experience costs as a result of these final amendments for reporting. Specifically, each facility will experience costs to read and understand the rule amendments. Costs associated with elimination of the SSM exemption were estimated as part of the reporting and recordkeeping costs and include time for re-evaluating previously developed SSM record systems. Costs associated with the requirement to electronically submit notifications and semi-annual compliance reports using CEDRI were estimated as part of the reporting and recordkeeping costs and include time for becoming familiar with CEDRI and the reporting template for semi-annual compliance reports. The recordkeeping and reporting costs are presented in section VI.C of this preamble.

We estimate that in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, 13 facilities using 18 control devices may be affected by the final rule requirements to conduct control device performance testing no less frequently than every 5 years. It is also assumed that 5 percent of the tests will need to be repeated, so that 19 total performance tests will be required. The total annualized cost will be about $4,400 per control device, with additional tests of control devices at the same facility costing 25 percent less due to reduced travel costs. The total annualized cost is approximately $77,000 per year for the source category, including retests, with an additional $3,300 in reporting costs per test in the year in which the test occurs.

We estimate that no facilities in the Surface Coating of Large Appliances source category nor in the Surface

Coating of Metal Furniture source category will be affected by the final rule requirements to conduct control device performance testing no less frequently than every 5 years. Only one facility in those two categories is currently using add-on controls to comply, and it is already required to conduct performance tests as a condition of their operating permit.

For further information on the potential costs, *see* the memoranda titled *Estimated Costs/Impacts of the 40 CFR Part 63 Subparts NNNN, OOOO and RRRR Monitoring Reviews,* February 2018, in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket.

D. What are the economic impacts?

For the final revisions to the NESHAP for the Surface Coating of Large Appliances, the total cost in 2019 is estimated to be $23,000 (in 2016 dollars) for the 10 affected entities and is expected to range from 0.000002 to 0.02 percent of annual sales revenue per affected entity. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

For the final revisions to the NESHAP for the Printing, Coating, and Dyeing of Fabrics and Other Textiles, the total cost in 2019 is estimated to be $90,000 (in 2016 dollars) for the 43 affected entities. Thirteen facilities will also incur performance testing and additional reporting costs, which we assume will occur in 2021. The annualized cost of each performance test is approximately $4,400, with additional tests of control devices at the same facility costing 25 percent less due to reduced travel costs. The reporting cost for each test is approximately $3,100. The 2018 equivalent annualized value of the present value of the costs (in 2016 dollars) for the analysis period (2019–2025) is estimated to be approximately $72,000 annually when assuming a 3-percent discount rate and $75,000 annually when assuming a 7-percent discount rate. The estimated maximum cost faced by affected entities is expected to range from 0.00002 to 0.42 percent of annual sales revenue per ultimate owner of affected entities. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

For the final revisions to the NESHAP for the Surface Coating of Metal Furniture, the total cost in 2019 is estimated to be $32,000 (in 2016 dollars) for the 16 affected entities and is expected to range from 0.00007 to 0.02 percent of annual sales revenue per ultimate owner of affected entities. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

E. What are the benefits?

As stated in section V.B. of the September 12, 2018, RTR proposal (83 FR 46311), we were unable to quantify the specific emissions reductions associated with eliminating the SSM exemption. We also are unable to quantify potential environmental benefits as a result of adding the requirement to conduct periodic add-on control device performance tests (*e.g.,* reduced emissions of organic HAP during periods of non-compliance). However, any reduction in HAP emissions would be expected to provide health benefits in the form of improved air quality and less exposure to potentially harmful chemicals.

F. What analysis of environmental justice did we conduct?

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from each source category across different demographic groups within the populations living near facilities.

1. Surface Coating of Large Appliances

The results of the demographic analysis for the Surface Coating of Large Appliances source category indicate that, for two of the 11 demographic groups, ''African American'' and ''Below the Poverty Level,'' the percentage of the population living within 5 kilometers (km) of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from large appliance coating facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer hazard index (HI) greater than 1 based on actual emissions from the source category.

The methodology and the results of the demographic analysis are presented in a technical report titled *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Large Appliances Source Category Operations* in the Surface Coating of Large Appliances Docket.

2. Printing, Coating, and Dyeing of Fabrics and Other Textiles

The results of the demographic analysis for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category are summarized in Table 5 of this preamble. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 5—PRINTING, COATING, AND DYEING OF FABRICS AND OTHER TEXTILES SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to printing, coating, and dyeing of fabrics and other textiles	Population with chronic noncancer HI Above 1 due to printing, coating, and dyeing of fabrics and other textiles
Total Population	317,746,049	8,500	0
White and Minority by Percent			
White	62	54	0
Minority	38	46	0
Minority Detail by Percent			
African American	12	39	0
Native American	0.8	0.02	0
Hispanic	18	5	0
Other and Multiracial	7	2	0
Income by Percent			
Below Poverty Level	14	26	0
Above Poverty Level	86	74	0
Education by Percent			
Over 25 and without High School Diploma	14	21	0
Over 25 and with a High School Diploma	86	79	0

The results of the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category demographic analysis indicate that emissions from the source category expose approximately 8,500 people to a cancer risk at or above 1-in-1 million and no one to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: ''African American,'' ''Over 25 Without a High School Diploma,'' and ''Below the Poverty Level.''

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category Operations,* available in the Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket.

3. Surface Coating of Metal Furniture

The results of the demographic analysis for the Surface Coating of Metal Furniture source category are summarized in Table 6 below. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 6—SURFACE COATING OF METAL FURNITURE SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to surface coating of metal furniture source category	Population with chronic noncancer HI above 1 due to surface coating of metal furniture source category
Total Population	317,746,049	2,100	0
White and Minority by Percent			
White	62	62	0
Minority	38	38	0

TABLE 6—SURFACE COATING OF METAL FURNITURE SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS—Continued

	Nationwide	Population with cancer risk at or above 1-in-1 million due to surface coating of metal furniture source category	Population with chronic noncancer HI above 1 due to surface coating of metal furniture source category
Minority Detail by Percent			
African American	12	7	0
Native American	0.8	0	0
Hispanic	18	30	0
Other and Multiracial	7	2	.....
Income by Percent			
Below Poverty Level	14	23	0
Above Poverty Level	86	77	0
Education by Percent			
Over 25 and without High School Diploma	14	34	0
Over 25 and with a High School Diploma	86	66	0

The results of the Surface Coating of Metal Furniture source category demographic analysis indicate that emissions from the source category expose approximately 2,100 people to a cancer risk at or above 1-in-1 million and no one to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: ''Hispanic or Latino,'' ''Over 25 Without a High School Diploma,'' and ''Below the Poverty Level.''

The methodology and the results of the demographic analysis are presented in the technical report, Risk and Technology Review—*Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Furniture Source Category Operations,* available in the Surface Coating of Metal Furniture Docket.

G. What analysis of children's environmental health did we conduct?

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are summarized in section IV.A of this preamble and are further documented in the *Large Appliances Risk Assessment Report, Fabrics and Other Textiles Risk Assessment Report, and Metal Furniture Risk Assessment Report* in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket, respectively.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

The information collection activities in each of these three subparts have been submitted for approval to OMB under the PRA.

1. Surface Coating of Large Appliances

The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1954.08. You can find a copy of the ICR in the Surface Coating of Large Appliances Docket (Docket ID No. EPA–HQ–OAR–2017–0670), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Large Appliances NESHAP, the EPA is not revising the emission limitation requirements for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semi-annual reporting. This information would be collected to assure compliance with 40 CFR part 63, subpart NNNN. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option, but this is not estimated to affect any facilities in this source category.

Respondents/affected entities: Facilities performing surface coating of large appliances.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart NNNN).

Estimated number of respondents: In the 3 years after the amendments are final, approximately 10 respondents per year would be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

Frequency of response: The total number of responses in year 1 is 30. Years 2 and 3 would have no responses.

Total estimated burden: The average annual burden to the large appliance facilities over the 3 years after the amendments are final is estimated to be 77 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 15 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the large appliance facilities is $7,700 in labor costs, in the first 3 years after the amendments are final. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be $700.

2. Printing, Coating, and Dyeing of Fabrics and Other Textiles

The ICR document that the EPA prepared has been assigned EPA ICR number 2071.08. You can find a copy of the ICR in the Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket (Docket ID No. EPA–HQ–OAR–2017–0668), and it is briefly summarized here.

As part of the RTR for the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP, the EPA is not revising the emission limitation requirements for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semiannual reports. This information is being collected to assure compliance with 40 CFR part 63, subpart OOOO. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option.

Respondents/affected entities: Facilities performing printing, coating, and dyeing of fabrics and other textiles.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart OOOO).

Estimated number of respondents: In the 3 years after the amendments are final, approximately 43 respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period. The EPA estimates that 13 facilities will be required to conduct performance testing for 19 control devices in the 3 three years after the amendments are final.

Frequency of response: The total number of responses in year 1 is 129. Year 2 will have no responses. Year 3 will have 19 responses related to control device performance tests.

Total estimated burden: The average annual burden to the Printing, Coating, and Dyeing of Fabrics and Other Textiles coating facilities over the 3 years after amendments are finalized is estimated to be 548 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 133 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the Printing, Coating, and Dyeing of Fabrics and Other Textiles coating facilities is $50,000 in labor costs and $120,000 in capital and operation and maintenance costs in the first 3 years after the amendments are final. The average annual Agency cost over the first 3 years after the amendments are final is estimated to be $14,000.

3. Surface Coating of Metal Furniture

The ICR document that the EPA prepared has been assigned EPA ICR number 1952.08. You can find a copy of the ICR in the Surface Coating of Metal Furniture Docket (Docket ID No. EPA–HQ–OAR–2017–0669), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Metal Furniture NESHAP, the EPA is not revising the emission limitations for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semi-annual reporting. This information would be collected to assure compliance with 40 CFR part 63, subpart RRRR. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option, but this is not estimated to affect any facilities in this source category.

Respondents/affected entities: Facilities performing surface coating of metal furniture.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart RRRR).

Estimated number of respondents: In the 3 years after the amendments are final, approximately 16 respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

Frequency of response: The total number of responses in year 1 is 48. Years 2 and 3 would have no responses.

Total estimated burden: The average annual burden to the large appliance facilities over the 3 years after the amendments are finalized is estimated to be 123 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 25 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the metal furniture facilities is $11,000 in labor costs in the first 3 years after the amendments are final. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be $1,200.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. No facilities meeting the Small Business Administration's definition of a small business will face significant control costs, based on the economic impact analysis completed for this action. More information and details of this analysis is provided in the technical documents titled *Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Large Appliances (Subpart NNNN), Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Printing, Coating, and Dyeing of Fabrics and Other Textiles (Subpart OOOO),* and *Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Metal Furniture (Subpart RRRR),* available in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket, respectively.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The

action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in any of the industries that would be affected by this action (large appliances surface coating; printing, coating, and dyeing of fabrics and other textiles; surface coating of metal furniture). Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections IV.A of this preamble.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA amended the three NESHAP in this action to provide owners and operators with the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, ''Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,'' to measure and subtract methane emissions from measured total gaseous organic mass emissions as carbon.

For the Surface Coating of Metal Furniture NESHAP, the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP, and the Surface Coating of Large Appliances NESHAP, the EPA incorporates by reference ASTM D2369–10 (2015)[e], ''Test Method for Volatile Content of Coatings,'' which describes a procedure for the determination of the weight percent volatile content of solvent-borne and water-borne coatings, as an acceptable alternative to EPA Method 24, ''Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings.''

For the Surface Coating of Large Appliances NESHAP, the EPA incorporates by reference ASTM D2111–10 (2015), ''Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures,'' These test methods cover the determination of the specific gravity of halogenated organic solvents and solvent admixtures. In addition. the EPA incorporates by reference ASTM D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' which is already specified in 40 CFR part 63, subpart NNNN, and covers the measurement of density of paints, inks, varnishes, lacquers, and components thereof, other than pigments, when in fluid form.

We found three voluntary consensus standards already allowed in the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP that have been replaced with newer versions of the methods. ASTM Dl475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' has replaced ASTM D1475–90; ASTM D2697–03 (2014),''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,'' believed to be applicable to the determination of the volume of nonvolatile matter of a variety of coatings, has replaced ASTM D2697–86 (1998); and ASTM D6093–97 (2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer,'' which covers the determination of the percent volume nonvolatile matter of a variety of clear and pigmented coatings, has replaced ASTM D6093–97 (2003).

The ASTM standards are available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959. *See https://www.astm.org/.*

The EPA decided not to include certain other voluntary consensus standards; these methods are impractical as alternatives because of the lack of equivalency, documentation, validation date, and other important technical and policy considerations. The search and review results have been documented and are in the memoranda titled *Voluntary Consensus Standard Results for Surface Coating of Large Appliances,* March 2018, *Voluntary Consensus Standard Results for Printing, Coating, and Dyeing of Fabrics and Other Textiles,* March 2018, and *Voluntary Consensus Standard Results for Surface Coating of Metal Furniture,* March 2018, in the Surface Coating of Large Appliances Docket (Docket ID No. EPA–HQ–OAR–2017–0670), Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket (Docket ID No. EPA–HQ–OAR–2017–0668), and Surface Coating of Metal Furniture Docket (Docket ID No. EPA–HQ–OAR–2017–0669), respectively, for the reasons for these determinations.

Under 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the General Provisions, a source may apply to the EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures in the final rule or any amendments.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that these final actions do not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). This action increases the level of environmental protection for all affected populations. The results of this evaluation are contained in section IV.A of this preamble and the technical reports, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category Operations,* September 2017; *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Furniture Source Category Operations,* October 2017; and *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Large Appliances Source Category Operations Demographic Analysis,* September 2017, which are available in the dockets for this action.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Appendix A, Hazardous substances, Incorporation by reference, Printing, coating, and dyeing of fabrics and other textiles, Reporting and recordkeeping requirements, Surface coating of large appliances, Surface coating of metal furniture.

Dated: December 20, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 63.14 is amended by:

■ a. Revising paragraphs (h)(13), (21), (26), (30), and (79).

■ b. Removing in paragraph (h)(78) the text ''63.4141, 63.4741(b), 63.4941(b),''.

The revisions read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(h) * * *

(13) ASTM D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.4141(b) and (c), 63.4741(b) and (c), 63.4751(c), and 63.4941(b) and (c).

* * * * *

(21) ASTM D2111–10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for §§ 63.4141(b) and (c) and 63.4741(a).

* * * * *

(26) ASTM D2369–10 (Reapproved 2015)[e], Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§ 63.4141(a) and (b), 63.4161(h), 63.4321(e), 63.4341(e), 63.4351(d), 63.4741(a), 63.4941(a) and (b), and 63.4961(j).

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(30) ASTM D2697–03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for §§ 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

* * * * *

(79) ASTM D6093–97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, Approved December 1, 2016, IBR approved for §§ 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

* * * * *

Subpart NNNN—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances

■ 3. Section 63.4100 is amended by revising paragraphs (b) and (d) to read as follows:

§ 63.4100 What are my general requirements for complying with this subpart?

* * * * *

(b) Before September 12, 2019, you must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i). On and after September 12, 2019, at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

* * * * *

(d) Before September 12, 2019, if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. A startup, shutdown, and malfunction plan is not required on and after September 12, 2019.

■ 4. Section 63.4110 is amended by revising paragraph (b)(9)(v) to read as follows:

§ 63. 4110 What notifications must I submit?

* * * * *

(b) * * *

(9) * * *

(v) Before September 12, 2019, a statement of whether or not you developed the startup, shutdown, and malfunction plan required by § 63.4100(d). This statement is not required on and after September 12, 2019.

* * * * *

■ 5. Section 63.4120 is amended by revising paragraphs (d), (e), (g), and (j) introductory text to read as follows:

§ 63.4120 What reports must I submit?

* * * * *

(d) If you use the compliant material option and there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraph (d)(1) or (2) of this section, as applicable.

(1) Before September 12, 2019, the information in paragraphs (d)(1)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The determination of the organic HAP content, according to § 63.4141(d), for each coating identified in paragraph (d)(1)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by coating suppliers or manufacturers or test reports.

(iii) The determination of mass fraction of organic HAP for each thinner and cleaning material identified in paragraph (d)(1)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by material

suppliers or manufacturers or test reports.

(iv) A statement of the cause of each deviation.

(2) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the date, time, and duration each was used.

(ii) The determination of the organic HAP content, according to § 63.4141(d), for each coating identified in paragraph (d)(2)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by coating suppliers or manufacturers or test reports.

(iii) The determination of mass fraction of organic HAP for each thinner and cleaning material identified in paragraph (d)(2)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by material suppliers or manufacturers or test reports.

(iv) A statement of the cause of each deviation (including unknown cause, if applicable).

(v) The number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4090, and a description of the method used to estimate the emissions.

(e) If you use the emission rate without add-on controls option and there was a deviation from the applicable emission limitation in § 63.4090, the semiannual compliance report must contain the information in paragraph (e)(1) or (2), as applicable.

(1) Before September 12, 2019, the information in paragraphs (e)(1)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the emission limit.

(ii) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must provide the calculations for Equations 1, 1A through 1C, 2, and 3 in § 63.4151; and, if applicable, the calculation used to determine the organic HAP in waste materials according to § 63.4151(e)(4). You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

(iii) A statement of the cause of each deviation.

(2) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the emission limit.

(ii) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must provide the calculations for Equations 1, 1A through 1C, 2, and 3 in § 63.4151; and, if applicable, the calculation used to determine the organic HAP in waste materials according to § 63.4151(e)(4). You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

(iii) A statement of the cause of each deviation (including unknown cause, if applicable).

(iv) The number of deviations, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4090, and a description of the method used to estimate the emissions.

* * * * *

(g) If you use the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraph (g)(1) or (2) of this section, as applicable.

(1) Before September 12, 2019, the information in paragraphs (g)(1)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period, during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4090.

(ii) The calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during the compliance period, using Equations 1, 1A through 1C, and 2 of § 63.4151 and, if applicable, the calculation used to determine the mass of organic HAP in waste materials according to § 63.4151(e)(4); the calculation of the total volume of coating solids used during the compliance period, using Equation 2 of § 63.4151; the calculation of the mass of organic HAP emission reduction during the compliance period by emission capture systems and add-on control devices, using Equations 1, 1A through 1C, 2, 3, and 3A through 3C of § 63.4161; and the calculation of the organic HAP emission rate, using Equation 4 of § 63.4161. You do not need to submit the background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

(iii) The date and time that each malfunction started and stopped.

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

(vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(vii) The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8).

(viii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control

device since the last semiannual reporting period.

(xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(xiv) A statement of the cause of each deviation.

(2) On and after September 12, 2019, the information in paragraphs (g)(2)(i) through (xii), (xiv), and (xv) of this section if there was a deviation from the applicable emission limit in § 63.4090 or the applicable operating limit(s) in Table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere) and the information in paragraph (g)(2)(xiii) of this section if there was a deviation from the work practice standards in § 63.4093(b).

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4090.

(ii) The calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during the compliance period, using Equations 1, 1A through 1C, and 2 of § 63.4151 and, if applicable, the calculation used to determine the mass of organic HAP in waste materials according to § 63.4151(e)(4); the calculation of the total volume of coating solids used during the compliance period, using Equation 2 of § 63.4151; the calculation of the mass of organic HAP emission reduction during the compliance period by emission capture systems and add-on control devices, using Equations 1, 1A through 1C, 2, 3, and 3A through 3C of § 63.4161; and the calculation of the organic HAP emission rate, using Equation 4 of § 63.4161. You do not need to submit the background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

(iii) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

(vi) For each instance that the CPMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and descriptions of corrective actions taken.

(vii) For each instance that the CPMS was out-of-control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(viii) The date, time, and duration of each deviation from an operating limit in Table 1 to this subpart; and the date, time, and duration of any bypass of the add-on control device.

(ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(xiii) For deviations from the work practice standards in § 63.4093(b), the number of deviations and, for each deviation:

(A) A description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.4100(b).

(B) The description required in paragraph (g)(2)(xiii)(A) of this section must include a list of the affected sources or equipment for which a deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(xiv) For deviations from an emission limit in § 63.4090 or operating limit in Table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(xv) For each deviation from an emission limit in § 63.4090 or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4090, and a description of the method used to estimate the emissions.

* * * * *

(j) Before September 12, 2019, if you use the emission rate with add-on controls option and you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (j)(1) and (2) of this section. The reports specified in paragraphs (j)(1) and (2) of this section are not required on and after September 12, 2019.

* * * * *

■ 6. Section 63.4121 is added to read as follows:

§ 63.4121 What are my electronic reporting requirements?

(a) Beginning no later than June 13, 2019, you must submit the results of the performance test required in § 63.4120(h) following the procedure specified in paragraphs (a)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (a)(1) of this section is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT

website, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(b) Beginning on March 15, 2021, the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.4110(a)(2) and (b) to the EPA via CEDRI. The CEDRI can be accessed through the EPA's CDX (*https://cdx.epa.gov*). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(c) Beginning on March 15, 2021, or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in § 63.4120 to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (*https://cdx.epa.gov*). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(d) If you are required to electronically submit a report through CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(e) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

■ 7. Section 63.4130 is amended by:
■ a. Revising paragraphs (f), (g), (j), (k) introductory text, and (k)(1) and (2); and
■ b. Redesignating paragraphs (k)(8) and (9) as paragraphs (k)(7) and (8), respectively.

The revisions read as follows:

§ 63.4130 What records must I keep?

* * * * *

(f) A record of the volume fraction of coating solids for each coating used

during each compliance period except for zero-HAP coatings for which volume solids determination is not required as allowed in § 63.4141.

(g) A record of the density for each coating used during each compliance period except for zero-HAP coatings for which volume solids determination is not required as allowed in § 63.4141 and, if you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, a record of the density for each thinner and cleaning material used during each compliance period.

* * * * *

(j) Before September 12, 2019, you must keep records of the date, time, and duration of each deviation. On and after September 12, 2019, for each deviation from an emission limitation reported under § 63.4120(d), (e), and (g), a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.4120(d), (e), and (g).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.4120(d), (e), and (g).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4090 or any applicable operating limit in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.4120(d), (e), and (g).

(4) A record of actions taken to minimize emissions in accordance with § 63.4100(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(k) If you use the emission rate with add-on controls option, you must also keep the records specified in paragraphs (k)(1) through (8) of this section.

(1) Before September 12, 2019, for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. The record in this paragraph (k)(1) is not required on and after September 12, 2019.

(2) Before September 12, 2019, the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. The records in this paragraph (k)(2) are not required on and after September 12, 2019.

* * * * *

■ 8. Section 63.4131 is amended by revising paragraph (a) to read as follows:

§ 63.4131 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a data base. Any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

* * * * *

■ 9. Section 63.4141 is amended by revising paragraphs (a)(1)(i) and (ii), (a)(2) and (4), and (b)(1), the definitions of ''$m_{volatiles}$'' and ''D_{avg}'' in Equation 1 of paragraph (b)(3), and paragraph (c) to read as follows:

§ 63.4141 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(a) * * *

(1) * * *

(i) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (for example, 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (for example, 0.763).

(2) *Method 24 in appendix A–7 of part 60.* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using Method 24, you may use ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14).

* * * * *

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data if they represent each organic HAP in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence.

* * * * *

(b) * * *

(1) *ASTM D2697–03 (R2014) or D6093–97 (R2016). You may* use ASTM D2697–03 (R2014), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,'' or D6093–97 (R2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer'' (incorporated by reference, *see* § 63.14) to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

* * * * *

(3) * * *

$m_{volatiles}$ = total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A–7 of part 60, or according to ASTM D2369–10 (R2015) Standard Test Method for Volatile Content of Coatings (incorporated by reference, *see* § 63.14), grams volatile matter per liter coating.

D_{avg} = average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' ASTM D2111–10 (R2015), ''Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures'' (both incorporated by reference, *see* § 63.14); if you use this method, the specific gravity must be corrected to a standard temperature, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM D1475–13 or ASTM D2111–10 (R2015) test results and other information sources, the test results will take precedence.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, ASTM D2111–10

(R2015), ''Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures''(both incorporated by reference, *see* § 63.14); if you use this method, the specific gravity must be corrected to a standard temperature, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between test results from ASTM D1475–13 or ASTM D2111–10 (R2015) and the supplier's or manufacturer's information, the test results will take precedence.

* * * * *

■ 10. Section 63.4142 is amended by revising paragraph (c) to read as follows:

§ 63.4142 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(c) As part of each semiannual compliance report required by § 63.4120, you must submit a statement that you were in compliance with the emission limitations during the reporting period because, during the compliance period, you used no thinners or cleaning materials that contained organic HAP, and you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4090.

* * * * *

■ 11. Section 63.4151 is amended by revising paragraph (h) to read as follows:

§ 63.4151 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(h) The organic HAP emission rate for the initial compliance period must be less than or equal to the applicable emission limit in § 63.4090. You must keep all records as required by §§ 63.4130 and 63.4131. As part of the Notification of Compliance Status required by § 63.4110, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and, if there were no deviations from the emission limitations, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4090.

■ 12. Section 63.4152 is amended by revising paragraphs (a) and (c) to read as follows:

§ 63.4152 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, for the compliance period, the organic HAP emission rate determined according to § 63.4151(a) through (g) must be less than or equal to the applicable emission limit in § 63.4090. Each month following the initial compliance period described in § 63.4150 is a compliance period.

* * * * *

(c) As part of each semiannual compliance report required by § 63.4120, if there were no deviations from the emission limitations, you must submit a statement that you were in compliance with the emission limitations during the reporting period because, during the compliance period, the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4090.

* * * * *

■ 13. Section 63.4160 is amended by revising the section heading and paragraphs (a)(1) and (b)(1) to read as follows:

§ 63.4160 By what date must I conduct initial performance tests and other initial compliance demonstrations?

(a) * * *

(1) All emission capture systems, add-on control devices, and CPMS you use to demonstrate compliance must be installed and operating no later than the applicable compliance date specified in § 63.4083. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4164, 63.4165, and 63.4166, and establish the operating limits required by § 63.4092 no later than the compliance date specified in § 63.4083. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4161(h), you must initiate the first material balance no later than the compliance date specified in § 63.4083.

* * * * *

(b) * * *

(1) All emission capture systems, add-on control devices, and CPMS you use to demonstrate compliance must be installed and operating no later than the applicable compliance date specified in § 63.4083. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4164, 63.4165, and 63.4166, and establish the operating limits required by § 63.4092 no later than 180 days after the applicable compliance date specified in § 63.4083. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4161(h), you must initiate the first material balance no later than 180 days after the applicable compliance date specified in § 63.4083.

* * * * *

■ 14. Section 63.4161 is amended by revising paragraphs (g) introductory text and (h)(3) to read as follows:

§ 63.4161 How do I demonstrate initial compliance?

* * * * *

(g) *Calculate the organic HAP emissions reduction for controlled coating operations not using liquid-liquid material balance.* For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate organic HAP emissions reduction, using Equation 1 of this section, by applying the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4163(c) or (d) occurs in the controlled coating operation, you must assume zero efficiency for the emission capture system and add-on control device. For the purposes of completing the compliance calculations, you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation. You must not include those materials in the calculations of organic HAP emissions reduction in Equation 1 of this section.

$$H_c = (A_I + B_I + C_I)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \quad (Eq.\ 1)$$

Where:

H_C = mass of organic HAP emissions reduction for the controlled coating operation during the compliance period, kg.

A_I = total mass of organic HAP in the coatings used in the controlled coating operation, kg, as calculated in Equation 1A of this section.

B_I = total mass of organic HAP in the thinners used in the controlled coating operation, kg, as calculated in Equation 1B of this section.

C_I = total mass of organic HAP in the cleaning materials used in the controlled coating operation during the compliance period, kg, as calculated in Equation 1C of this section.

CE = capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.4164 and 63.4165 to measure and record capture efficiency.

DRE = organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.4164 and 63.4166 to measure and record the organic HAP destruction or removal efficiency.

* * * * *

(h) * * *

(3) Determine the mass fraction of volatile organic matter for each coating used in the coating operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 in appendix A–7 of part 60, ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14), or an EPA approved alternative method. Alternatively, you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24, ASTM D2369–10 (R2015), or an approved alternative method, the test method results will govern.

* * * * *

■ 15. Section 63.4163 is amended by revising the section heading and paragraph (c) introductory text, adding paragraph (c)(3), and revising paragraphs (e) and (h) to read as follows:

§ 63.4163 How do I conduct periodic performance tests and demonstrate continuous compliance with the emission limitations?

* * * * *

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4092 that applies to you as specified in Table 1 to this subpart, and you must conduct periodic performance tests as specified in paragraph (c)(3) of this section.

* * * * *

(3) Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct according to the procedures in §§ 63.4164, 63.4165, and 63.4166 periodic performance tests of each capture system and add-on control device used to demonstrate compliance, and you must establish the operating limits required by § 63.4092. You must conduct the first periodic performance test and establish the operating limits required by § 63.4092 before March 15, 2022, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after March 15, 2017. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test.

* * * * *

(e) You must demonstrate continuous compliance with the work practice standards in § 63.4093. If you did not develop a work practice plan, did not implement the plan, or did not keep the records required by § 63.4130(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.4110(b)(6) and 63.4120(g).

* * * * *

(h) Before September 12, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e). On and after September 12, 2019, as specified in § 63.4100(b), at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions, and determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator.

* * * * *

■ 16. Section 63.4164 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§ 63.4164 What are the general requirements for performance tests?

(a) You must conduct each performance test required by § 63.4160 according to the requirements in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

■ 17. Section 63.4166 is amended by revising paragraphs (a)(1) through (4) and (b) introductory text to read as follows:

§ 63.4166 How do I determine the add-on control device emission destruction or removal efficiency?

(a) * * *

(1) Use Method 1 or 1A in appendix A–1 of part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, or 2F in appendix A–1, or Method 2G in appendix A–2, of part 60, as

appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B in appendix A–2 of part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME, PTC 19.10–1981, ''Flue and Exhaust Gas Analyses'' (incorporated by reference, *see* § 63.14).

(4) Use Method 4 in appendix A–3 of part 60 to determine stack gas moisture.

* * * * *

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A in appendix A–7 of part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements. You may use Method 18 in appendix A–6 of part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

* * * * *

■ 18. Section 63.4167 is amended by revising the section heading, introductory text, and paragraph (f)(1) to read as follows:

§ 63.4167 How do I establish the emission capture system and add-on control device operating limits during performance tests?

During the performance tests required by §§ 63.4160 and 63.4163, and described in §§ 63.4164, 63.4165, and 63.4166, you must establish the operating limits required by § 63.4092 according to this section unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.4092.

* * * * *

(f) * * *

(1) During the capture efficiency determination required by §§ 63.4160 and 63.4163, and described in §§ 63.4164 and 63.4165, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

* * * * *

■ 19. Section 63.4168 is amended by revising paragraphs (a)(4) and (5) and (c)(2) and (3) to read as follows:

§ 63.4168 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) * * *

(4) You must maintain the CPMS at all times in accordance with § 63.4100(b) and have readily available necessary parts for routine repairs of the monitoring equipment.

(5) Before September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments). On and after September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.4100(b).

* * * * *

(c) * * *

(2) For a catalytic oxidizer, install a gas temperature monitor in the gas stream immediately before the catalyst bed, and if you establish operating limits according to § 63.4167(b)(1) and (2), also install a gas temperature monitor in the gas stream immediately after the catalyst bed.

(3) For each gas temperature monitoring device, you must comply with the requirements in paragraphs (c)(3)(i) through (vii) of this section. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

* * * * *

■ 20. Section 63.4181 is amended by revising the definition of ''Deviation'' to read as follows:

§ 63.4181 What definitions apply to this subpart?

* * * * *

Deviation means:

(1) Before September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, or operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction regardless of whether or not such failure is permitted by this subpart; and

(2) On and after September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, or operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

* * * * *

■ 21. Table 2 to subpart NNNN of part 63 is revised to read as follows:

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes.	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart NNNN is also specified in § 63.4081.
§ 63.1(c)(1)	Applicability After Standard Established	Yes.	
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart NNNN.
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4181.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.4083 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.4083 specifies the compliance dates.
§ 63.6(e)(1)(i)	Operation and Maintenance	Yes, before September 12, 2019. No on and after September 12, 2019.	*See* § 63.4100(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Operation and Maintenance	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes.	
§ 63.6(e)(3)	Startup, shutdown, malfunction plan (SSMP).	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission standards.	No	Subpart NNNN does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes.	
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4164, 63.4165, and 63.4166.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4160 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(b)–(d)	Performance Test Requirements—Notification, Quality Assurance Facilities Necessary for Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Conduct of performance tests	Yes, before September 12, 2019. No on and after September 12, 2019.	*See* § 63.4164(a)(1).
§ 63.7(e)(2)–(4)	Conduct of performance tests	Yes.	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued

[You must comply with the applicable general provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.4168.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart NNNN does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.8(c)(2)–(3)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4168.
§ 63.8(c)(4)	CMS	No	Section 63.4168 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart NNNN does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.4168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes.	
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	Section 63.4120 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart NNNN does not require the use of CEMS.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart NNNN does not require the use of CEMS.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.4167 and 63.4168 specify monitoring data reduction.
§ 63.9(a)–(d)	Notification Requirements	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart NNNN does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS	No	Subpart NNNN does not require the use of CEMS.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.4110 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4130 and 63.4131.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	Yes, before September 12, 2019. No on and after September 12, 2019.	*See* § 63.4130(j).
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet Standards.	Yes, before September 12, 2019. No on and after September 12, 2019.	*See* § 63.4130(j).

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment.	Yes.	
§ 63.10(b)(2)(iv)–(v)	Actions Taken to Minimize Emissions During SSM.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4130(j)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Records for CMS malfunctions	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4130(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)–(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Records	Yes.	
§ 63.10(b)(2)(xiii)		No	Subpart NNNN does not require the use of CEMS.
§ 63.10(b)(2)(xiv)		Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(7)–(8)	Additional Recordkeeping Requirements for Sources with CMS.	No	*See* § 63.4130(j)(1) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(10)–(14)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(15)	Records Regarding the SSMP	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4120.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4120(h).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart NNNN does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4120(g).
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart NNNN does not require the use of CEMS.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.4120(g) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart NNNN does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares	No	Subpart NNNN does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information/Confidentiality	Yes.	

■ 22. Table 5 to subpart NNNN of part 63 is added to read as follows:

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS

Chemical name	CAS No.
1,1,2,2-Tetrachloroethane	79–34–5
1,1,2-Trichloroethane	79–00–5
1,1-Dimethylhydrazine	57–14–7

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
1,2-Dibromo-3-chloropropane	96–12–8
1,2-Diphenylhydrazine	122–66–7
1,3-Butadiene	106–99–0
1,3-Dichloropropene	542–75–6
1,4-Dioxane	123–91–1
2,4,6-Trichlorophenol	88–06–2
2,4/2,6-Dinitrotoluene (mixture)	25321–14–6
2,4-Dinitrotoluene	121–14–2
2,4-Toluene diamine	95–80–7
2-Nitropropane	79–46–9
3,3′-Dichlorobenzidine	91–94–1
3,3′-Dimethoxybenzidine	119–90–4
3,3′-Dimethylbenzidine	119–93–7
4,4′-Methylene bis(2-chloroaniline)	101–14–4
Acetaldehyde	75–07–0
Acrylamide	79–06–1
Acrylonitrile	107–13–1
Allyl chloride	107–05–1
alpha-Hexachlorocyclohexane (a-HCH)	319–84–6
Aniline	62–53–3
Benzene	71–43–2
Benzidine	92–87–5
Benzotrichloride	98–07–7
Benzyl chloride	100–44–7
beta-Hexachlorocyclohexane (b-HCH)	319–85–7
Bis(2-ethylhexyl)phthalate	117–81–7
Bis(chloromethyl)ether	542–88–1
Bromoform	75–25–2
Captan	133–06–2
Carbon tetrachloride	56–23–5
Chlordane	57–74–9
Chlorobenzilate	510–15–6
Chloroform	67–66–3
Chloroprene	126–99–8
Cresols (mixed)	1319–77–3
DDE	3547–04–4
Dichloroethyl ether	111–44–4
Dichlorvos	62–73–7
Epichlorohydrin	106–89–8
Ethyl acrylate	140–88–5
Ethylene dibromide	106–93–4
Ethylene dichloride	107–06–2
Ethylene oxide	75–21–8
Ethylene thiourea	96–45–7
Ethylidene dichloride (1,1-Dichloroethane)	75–34–3
Formaldehyde	50–00–0
Heptachlor	76–44–8
Hexachlorobenzene	118–74–1
Hexachlorobutadiene	87–68–3
Hexachloroethane	67–72–1
Hydrazine	302–01–2
Isophorone	78–59–1
Lindane (hexachlorocyclohexane, all isomers)	58–89–9
m-Cresol	108–39–4
Methylene chloride	75–09–2
Naphthalene	91–20–3
Nitrobenzene	98–95–3
Nitrosodimethylamine	62–75–9
o-Cresol	95–48–7
o-Toluidine	95–53–4
Parathion	56–38–2
p-Cresol	106–44–5
p-Dichlorobenzene	106–46–7
Pentachloronitrobenzene	82–68–8
Pentachlorophenol	87–86–5
Propoxur	114–26–1
Propylene dichloride	78–87–5
Propylene oxide	75–56–9
Quinoline	91–22–5
Tetrachloroethene	127–18–4
Toxaphene	8001–35–2

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
Trichloroethylene	79–01–6
Trifluralin	1582–09–8
Vinyl bromide	593–60–2
Vinyl chloride	75–01–4
Vinylidene chloride	75–35–4

Subpart OOOO—National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles

■ 23. Section 63.4300 is amended by revising paragraphs (a)(3)(i), (b), and (c) to read as follows:

§ 63.4300 What are my general requirements for complying with this subpart?

(a) * * *

(3) * * *

(i) Before September 12, 2019, the web coating/printing or dyeing/finishing operation(s) must be in compliance with the applicable emission limit in Table 1 to this subpart or minimize emissions at all times as required by § 63.6(e)(1). On and after September 12, 2019, the web coating/printing or dyeing/finishing operation(s) must be in compliance with the applicable emission limit in Table 1 to this subpart at all times.

* * * * *

(b) Before September 12, 2019, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). On and after September 12, 2019, at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before September 12, 2019, if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any web coating/printing or dyeing/finishing operation equipment such as conveyors that move the substrate among enclosures that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions. A startup, shutdown, and malfunction plan is not required on and after September 12, 2019.

■ 24. Section 63.4310 is amended by revising paragraphs (c)(9) introductory text and (c)(9)(iv) and adding paragraph (c)(9)(v) to read as follows:

§ 63.4310 What notifications must I submit?

* * * * *

(c) * * *

(9) For the emission rate with add-on controls option as specified in § 63.4291(a)(3) and (c)(3), the organic HAP overall control efficiency option as specified in § 63.4291(a)(4), and the oxidizer outlet organic HAP concentration option as specified in § 63.4291(a)(5), for each controlled web coating/printing or dyeing/finishing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4341(e)(5) or (f)(5) or § 63.4351(d)(5), you must include the information specified in paragraphs (c)(9)(i) through (v) of this section.

* * * * *

(iv) A statement of whether or not you developed and implemented the work practice plan required by § 63.4293.

(v) Before September 12, 2019, a statement of whether or not you developed the startup, shutdown, and malfunction plan required by § 63.4300(c). This statement is not required on and after September 12, 2019.

■ 25. Section 63.4311 is amended by:
■ a. Revising paragraphs (a)(5) and (6) and (a)(7) introductory text;
■ b. Redesignating paragraph (a)(7)(i) as (a)(7)(i)(A);
■ c. Adding new paragraph (a)(7)(i) introductory text;
■ d. Redesignating paragraph (a)(7)(ii) as (a)(7)(i)(B) and revising it;
■ e. Redesignating paragraphs (a)(7)(iii) through (xv) as (a)(7)(i)(C) through (O), respectively;
■ f. Adding new paragraph (a)(7)(ii).
■ g. Revising paragraphs (a)(8) introductory text, (a)(8)(i), and (c) introductory text; and
■ h. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

§ 63.4311 What reports must I submit?

(a) * * *

(5) *Deviations: Compliant material option.* If you use the compliant material option, and there was a deviation from the applicable organic HAP content requirements in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraph (a)(5)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraph (a)(5)(i)(A) through (D) of this section.

(A) Identification of each coating, printing, slashing, dyeing or finishing material applied that deviated from the emission limit and each thinning or cleaning material applied in web coating/printing operations that contained organic HAP, and the dates and time periods each was applied.

(B) The calculation of the organic HAP content using Equation 1 of § 63.4321 for each coating or printing material identified in paragraph (a)(5)(i)(A) of this section. You do not need to submit background data supporting this calculation (*e.g.,* information provided by material suppliers or manufacturers, or test reports).

(C) The determination of mass fraction of organic HAP for each regulated material identified in

paragraph (a)(5)(i)(A) of this section. You do not need to submit background data supporting this calculation (*e.g.,* information provided by material suppliers or manufacturers, or test reports).

(D) A statement of the cause of each deviation.

(ii) On and after September 12, 2019, the information in paragraphs (a)(5)(ii)(A) through (E) of this section.

(A) Identification of each coating, printing, slashing, dyeing or finishing material applied that deviated from the emission limit and each thinning or cleaning material applied in web coating/printing operations that contained organic HAP, and the date, time, and duration each was applied.

(B) The calculation of the organic HAP content using Equation 1 of § 63.4321 for each coating or printing material identified in paragraph (a)(5)(ii)(A) of this section. You do not need to submit background data supporting this calculation (*e.g.,* information provided by material suppliers or manufacturers, or test reports).

(C) The determination of mass fraction of organic HAP for each regulated material identified in paragraph (a)(5)(ii)(A) of this section. You do not need to submit background data supporting this calculation (*e.g.,* information provided by material suppliers or manufacturers, or test reports).

(D) A statement of the cause of each deviation (including unknown cause, if applicable).

(E) The number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in Table 1 to this subpart, and a description of the method used to estimate the emissions.

(6) *Deviations: Emission rate without add-on controls option.* If you use the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraph (a)(6)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(6)(i)(A) through (C) of this section.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A and 1B, 2, and 3 in § 63.4331 for web coating/printing operations; and for Equations 4, 4A, 5, and 6 in § 63.4331 for dyeing/finishing operations; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4331(a)(4)(iii) or (b)(3)(ii); and, for dyeing/finishing operations, if applicable, the mass of organic HAP in wastewater streams calculation for Equation 7 in § 63.4331. You do not need to submit background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(C) A statement of the cause of each deviation.

(ii) On and after September 12, 2019, the information in paragraphs (a)(6)(ii)(A) through (D) of this section.

(A) The beginning and ending dates of each compliance period, during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A and 1B, 2, and 3 in § 63.4331 for web coating/printing operations; and for Equations 4, 4A, 5, and 6 in § 63.4331 for dyeing/finishing operations; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4331(a)(4)(iii) or (b)(3)(ii); and, for dyeing/finishing operations, if applicable, the mass of organic HAP in wastewater streams calculation for Equation 7 in § 63.4331. You do not need to submit background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(C) A statement of the cause of each deviation (including unknown cause, if applicable).

(D) The number of deviations, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in Table 1 to this subpart, and a description of the method used to estimate the emissions.

(7) *Deviations: Add-on controls options.* If you use one of the add-on controls options in § 63.4291(a) or (c) and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraph (a)(7)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(7)(i)(A) through (O) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

* * * * *

(B) If you use the emission rate option, the calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, 1B, and 2 of § 63.4331 and Equations 1, 1A, 1B, 1C, 2, 3, 3A and 3B and 4 of § 63.4341 for web coating/printing operations; and Equations 4, 4A, 5, 6, and 7 of § 63.4331 and Equations 5, 5A, 5B, 6, 7, and 8 of § 63.4341 for dyeing/finishing operations. You do not need to submit the background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

* * * * *

(ii) On and after September 12, 2019, the information in paragraphs (a)(7)(ii)(A) through (M), (O), and (P) of this section if there was a deviation from the applicable emission limit in Table 1 to this subpart or the applicable operating limit(s) in Table 2 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), and the information in paragraph (a)(7)(ii)(N) of this section if there was a deviation from the applicable work practice standards in § 63.4293(b).

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) If you use the emission rate option, the calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, 1B, and 2 of § 63.4331 and Equations 1, 1A, 1B, 1C, 2, 3, 3A and 3B and 4 of § 63.4341 for web coating/printing operations; and Equations 4, 4A, 5, 6, and 7 of § 63.4331 and Equations 5, 5A, 5B, 6, 7, and 8 of § 63.4341 for dyeing/finishing operations. You do not need to submit the background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(C) If you use the organic HAP overall control efficiency option, the calculations used to determine the organic HAP overall control efficiency for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, and 1B of § 63.4331; Equations 1, 1A, 1B, 1C, 2, 3, 3A, and 3B of § 63.4341; and Equation 1 of § 63.4351. You do not need to submit the background data supporting these calculations (*e.g.,* test reports).

(D) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

(E) A brief description of the CPMS.

(F) The date of the latest CPMS certification or audit.

(G) For each instance that the CPMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and descriptions of corrective actions taken.

(H) For each instance that the CPMS was out-of-control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(I) The date, time, and duration of each deviation from an operating limit in Table 2 to this subpart, and the date, time, and duration of any bypass of the add-on control device.

(J) A summary of the total duration of each deviation from an operating limit in Table 2 to this subpart and each bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(K) A breakdown of the total duration of the deviations from the operating limits in Table 2 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(L) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(M) A description of any changes in the CPMS, web coating/printing or dyeing/finishing operation, emission capture system, or add-on control device since the last semiannual reporting period.

(N) For deviations from the work practice standards, the number of deviations, and, for each deviation, a description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.4300(b). The description of the deviation must include a list of the affected sources or equipment for which the deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(O) For deviations from an emission limit in Table 1 to this subpart or operating limit in Table 2 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(P) For each deviation from an emission limit in Table 1 to this subpart or operating limit in Table 2 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in Table 1 to this subpart, and a description of the method used to estimate the emissions.

(8) *Deviations: Equivalent Emission Rate Option.* If you use the equivalent emission rate option, and there was a deviation from the operating scenarios, as defined in § 63.4371, used to demonstrate initial compliance, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (iv) of this section.

(i) Before September 12, 2019, the beginning and ending dates of each compliance period during which the deviation occurred. On and after September 12, 2019, the beginning and ending dates of each compliance period during which the deviation occurred, the number of deviations during the compliance period, and, for each deviation, the date, time, and duration of the deviation; a list of the affected sources or equipment; and a statement of the cause of the deviation (including an unknown cause, if applicable).

* * * * *

(c) Before September 12, 2019, if you use one of the add-on control options in § 63.4291(a) or (c) and you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. The reports specified in paragraphs (c)(1) and (2) of this section are not required on and after September 12, 2019.

* * * * *

(d) Beginning no later than June 13, 2019, you must submit the results of the performance test required in paragraph (b) of this section following the procedure specified in paragraphs (d)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (d)(1) of this section is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (d)(1) of this section.

(e) Beginning on March 15, 2021, the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.4310(c) to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (*https://cdx.epa.gov*). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart,

regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the extensible markup language (XML) schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(f) Beginning on March 15, 2021, or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in paragraph (a) of this section to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (*https://cdx.epa.gov*). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(g) If you are required to electronically submit a report through CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature *(e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

■ 26. Section 63.4312 is amended by revising paragraphs (i), (j) introductory text, and (j)(1) and (2) to read as follows:

§ 63.4312 What records must I keep?

* * * * *

(i) Before September 12, 2019, you must keep records of the date, time, and duration of each deviation. On and after September 12, 2019, for each deviation from an emission limitation reported under § 63.4311(a)(5) through (8), a record of the information specified in paragraphs (i)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.4311(a)(5) through (8).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.4311(a)(5) through (8).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in Table 1 to this subpart or any applicable operating limit in Table 2 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.4311(a)(5) through (8). If you use the equivalent emission rate option to comply with this subpart, a record of the applicable information specified in § 63.4311(a)(8)(ii) through (iv) satisfies the recordkeeping requirement in this paragraph (i)(3).

(4) A record of actions taken to minimize emissions in accordance with § 63.4300(b) and any corrective actions

taken to return the affected unit to its normal or usual manner of operation.

(j) If you use the emission rate with add-on controls option, the organic HAP overall control efficiency option, or the oxidizer outlet organic HAP concentration option, you must also keep the records specified in paragraphs (j)(1) through (8) of this section.

(1) Before September 12, 2019, for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. The record in this paragraph (j)(1) is not required on and after September 12, 2019.

(2) Before September 12, 2019, the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. The records in this paragraph (j)(2) are not required on and after September 12, 2019.

* * * * *

■ 27. Section 63.4313 is amended by revising paragraph (a) to read as follows:

§ 63.4313 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. Any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

* * * * *

■ 28. Section 63.4321 is amended by revising paragraphs (e)(1)(i)(A), (e)(1)(ii) and (iv), and (e)(2)(i) to read as follows:

§ 63.4321 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(e) * * *

(1) * * *

(i) * * *

(A) Count each organic HAP in Table 6 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 6 to this subpart) is measured to be 0.5 percent of the material by mass, you don't have to count it. Express the mass fraction of each organic HAP you count as a value truncated to no more than four places after the decimal point (*e.g.,* 0.3791).

* * * * *

(ii) *Method 24 in appendix A–7 of part 60.* You may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using Method 24, you may use ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14). For a multi-component coating with reactive chemicals, you may use Method 24 or ASTM D2369–10 (R2015) on the coating as applied to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for the mass fraction of organic HAP determined from the sum of organic HAP in each component.

* * * * *

(iv) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (e)(1)(i) through (iii) of this section, such as manufacturer's formulation data, if it represents each organic HAP in Table 6 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 6 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (e)(1)(i) through (iii) of this section on coating, thinning, or cleaning material, then the test method results will take precedence. Information from the supplier or manufacturer of the printing, slashing, dyeing, or finishing material is sufficient for determining the mass fraction of organic HAP.

* * * * *

(2) * * *

(i) *Method 24 in appendix A–7 of part 60.* You may use Method 24 for determining the mass fraction of solids of coating materials. As an alternative to using Method 24, you may use ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14).

* * * * *

■ 29. Section 63.4340 is amended by revising the section heading and paragraph (b)(3) to read as follows:

§ 63.4340 By what date must I conduct initial performance tests and other initial compliance demonstrations?

* * * * *

(b) * * *

(3) You must complete the compliance demonstration for the initial compliance period according to the requirements of § 63.4341. The initial compliance period begins on the applicable compliance date specified in § 63.4283 and ends on the last day of the 12th full month after the compliance date. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4360, 63.4361, and 63.4362; results of liquid-liquid material balances conducted according to § 63.4341(e)(5) or (f)(5); calculations according to § 63.4341 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Table 1 to this subpart; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4364; and documentation of whether you developed and implemented the work practice plan required by § 63.4293.

■ 30. Section 63.4341 is amended:

■ a. In paragraph (e)(4) introductory text by removing the three sentences after the subject heading and adding four sentences in their place;

■ b. By revising paragraph (e)(5)(iii); and

■ c. In paragraph (f)(4) introductory text by removing the first four sentences after the subject heading and adding four new sentences in their place.

The additions and revision read as follows:

§ 63.4341 How do I demonstrate initial compliance?

* * * * *

(e) * * *

(4) * * * For each controlled web coating/printing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions using Equation 1 of this section. The equation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coating, printing, thinning, and cleaning materials applied in the web coating/printing operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4342(c) or (d) occurs in the controlled web coating/printing operation, then you must assume zero efficiency for the emission capture system and add-on control device. Equation 1 of this section treats the coating, printing, thinning, and

cleaning materials applied during such a deviation as if they were used on an uncontrolled web coating/printing operation for the time period of the deviation. * * *

* * * * *

(5) * * *

(iii) Determine the mass fraction of volatile organic matter for each coating, printing, cleaning, and thinning material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating, printing, cleaning, and thinning material. You may determine the volatile organic matter mass fraction using Method 24 in appendix A–7 of part 60, ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14), or an EPA approved alternative method. Alternatively, you may use information provided by the manufacturer or supplier of the coating or printing material. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24, ASTM D2369–10 (R2015), or an approved alternative method, the test method results will govern.

* * * * *

(f) * * *

(4) * * * For each controlled dyeing/finishing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions using Equation 5 of this section. The equation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the dyeing and finishing materials applied in the dyeing/finishing operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4342(c) or (d) occurs in the controlled dyeing/finishing operation, then you must assume zero efficiency for the emission capture system and add-on control device. Equation 5 of this section treats the dyeing and finishing materials applied during such a deviation as if they were applied on an uncontrolled dyeing/finishing operation for the time period of the deviation. * * *

* * * * *

■ 31. Section 63.4342 is amended by revising the section heading and paragraph (c) introductory text, adding paragraph (c)(3), and revising paragraphs (f) and (h) to read as follows:

§ 63.4342 How do I conduct periodic performance tests and demonstrate continuous compliance with the emission limitations?

* * * * *

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4292 that applies to you, as specified in Table 2 to this subpart, and you must conduct periodic performance tests as specified in paragraph (c)(3) of this section.

* * * * *

(3) Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4351(d)(5), within 5 years following the previous performance test, you must conduct according to the procedures in §§ 63.4360, 63.4361, and 63.4362 a periodic performance test of each capture system and add-on control device used, and you must establish the operating limits required by § 63.4292. You must conduct the first periodic performance test and establish the operating limits required by § 63.4292 before March 15, 2022, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after March 15, 2017. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test.

* * * * *

(f) As part of each semiannual compliance report required in § 63.4311, you must identify the coating/printing and dyeing/finishing operation(s) for which you use the emission rate with add-on controls option. If there were no deviations from the applicable emission limitations in §§ 63.4290, 63.4292, and 63.4293, you must submit a statement that, as appropriate, the web coating/printing operations or the dyeing/finishing operations were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Table 1 to this subpart, and you achieved the operating limits required by § 63.4292 and the work practice standards required by § 63.4293 during each compliance period.

* * * * *

(h) Before September 12, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or web coating/printing or dyeing/finishing operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e). On and after September 12, 2019, as specified in § 63.4300(b), at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions, and determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator.

* * * * *

■ 32. Section 63.4350 is amended by revising paragraphs (a)(3) and (b)(3) to read as follows:

§ 63.4350 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) * * *

(3) You must complete the compliance demonstration for the initial compliance period according to the requirements of § 63.4351. The initial compliance period begins on the applicable compliance date specified in § 63.4283 and ends on the last day of the first full month after the compliance date, or the date you conduct the performance tests of the emission capture systems and add-on control devices, or initiate the first liquid-liquid material balance for a solvent recovery system, whichever is later. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4360, 63.4361, and 63.4362; results of liquid-liquid material balances conducted according to § 63.4351(d)(5); calculations according to § 63.4351 and supporting documentation showing that during the initial compliance period either the organic HAP overall control efficiency was equal to or greater than the applicable overall control efficiency limit in Table 1 to this subpart or the oxidizer outlet organic HAP concentration was no greater than 20 parts per million by volume (ppmv) on

a dry basis; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4364; and documentation of whether you developed and implemented the work practice plan required by § 63.4293.

* * * * *

(b) * * *

(3) You must complete the compliance demonstration for the initial compliance period according to the requirements of § 63.4351. The initial compliance period begins on the applicable compliance date specified in § 63.4283 and ends on the last day of the first full month after the compliance date. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4360, 63.4361, and 63.4362; results of liquid-liquid material balances conducted according to § 63.4351(d)(5); calculations according to § 63.4351 and supporting documentation showing that during the initial compliance period the organic HAP overall control efficiency was equal to or greater than the applicable organic HAP overall control efficiency limit in Table 1 to this subpart or the oxidizer outlet organic HAP concentration was no greater than 20 ppmv on a dry basis and the efficiency of the capture system was 100 percent; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4364; and documentation of whether you developed and implemented the work practice plan required by § 63.4293.

■ 33. Section 63.4351 is amended by revising paragraphs (a), (d)(4) introductory text, (d)(5)(iii), and (e) introductory text to read as follows:

§ 63.4351 How do I demonstrate initial compliance?

(a) You may use the organic HAP overall control efficiency option or the oxidizer outlet organic HAP concentration option for any individual web coating/printing operation, for any group of web coating/printing operations in the affected source, or for all of the web coating/printing operations in the affected source. You may include both controlled and uncontrolled web coating/printing operations in a group for which you use the organic HAP overall control efficiency option. You must use either the compliant material option, the emission rate without add-on controls option, or the emission rate with add-on controls option for any web coating/printing operation(s) in the affected source for which you do not use either the organic HAP overall control efficiency option or the oxidizer outlet organic HAP concentration option. To demonstrate initial compliance, any web coating/printing operation for which you use the organic HAP overall control efficiency option must meet the applicable organic HAP overall control efficiency limitations in Table 1 to this subpart according to the procedures in paragraph (d) of this section. Any web coating/printing operation for which you use the oxidizer outlet organic HAP concentration option must meet the 20 ppmv on a dry basis limit and achieve 100 percent capture efficiencies according to the procedures in paragraph (e) of this section. To demonstrate initial compliance with either option, you also must meet the applicable operating limits in § 63.4292 according to the procedures in paragraph (b) of this section and the work practice standards in § 63.4293 according to the procedures in paragraph (c) of this section. When calculating the organic HAP overall control efficiency according to this section, do not include any coating, printing, thinning, or cleaning materials applied on web coating/printing operations for which you use the compliant material option, the emission rate without add-on controls option, the emission rate with add-on controls option, or the oxidizer outlet organic HAP concentration option. You do not need to redetermine the mass of organic HAP in coating, printing, thinning, or cleaning materials that have been reclaimed onsite and reused in web coating/printing operation(s) for which you use the organic HAP overall control efficiency option.

* * * * *

(d) * * *

(4) *Calculate the organic HAP emissions reductions for controlled web coating/printing operations not using liquid-liquid material balance.* For each controlled web coating/printing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions using Equation 1 of § 63.4341. The equation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coating, printing, thinning, and cleaning materials applied in the web coating/printing operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4352(c) or (d) occurs in the controlled web coating/printing operation, then you must assume zero efficiency for the emission capture system and add-on control device. Equation 1 of § 63.4341 treats the coating, printing, thinning, and cleaning materials applied during such a deviation as if they were applied on an uncontrolled web coating/printing operation for the time period of the deviation.

* * * * *

(5) * * *

(iii) Determine the mass fraction of volatile organic matter for each coating and printing material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating and printing material. You may determine the volatile organic matter mass fraction using Method 24 in appendix A–7 of part 60, ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14), or an EPA approved alternative method. Alternatively, you may use information provided by the manufacturer or supplier of the coating or printing material. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24, ASTM D2369–10 (R2015), or an approved alternative method, the test method results will govern.

* * * * *

(e) *Compliance with oxidizer outlet organic HAP concentration limit.* You must follow the procedures in paragraphs (e)(1) through (3) of this section to demonstrate compliance with the oxidizer outlet organic HAP concentration limit of no greater than 20 ppmv on a dry basis.

* * * * *

■ 34. Section 63.4352 is amended by revising paragraph (h) to read as follows:

§ 63.4352 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(h) Before September 12, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or web coating/printing operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you

were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e). On and after September 12, 2019, as specified in § 63.4300(b), at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions, and determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator.

* * * * *

■ 35. Section 63.4360 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§ 63.4360 What are the general requirements for performance tests?

(a) You must conduct each performance test required by § 63.4340 or § 63.4350 according to the requirements in this section, unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) *Representative web coating/printing or dyeing/finishing operation operating conditions.* You must conduct the performance test under representative operating conditions for the web coating/printing or dyeing/finishing operation. Operations during periods of startup, shutdown, or nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

■ 36. Section 63.4362 is amended by revising paragraphs (a)(1) through (4) and (b) introductory text to read as follows:

§ 63.4362 How do I determine the add-on control device emission destruction or removal efficiency?

* * * * *

(a) * * *

(1) Use Method 1 or 1A in appendix A–1 of part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, or 2F in appendix A–1, or Method 2G in appendix A–2, of part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B in appendix A of part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME, PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]'' (incorporated by reference, *see* § 63.14).

(4) Use Method 4 in appendix A of part 60 to determine stack gas moisture.

* * * * *

(b) Measure the volatile organic matter concentration as carbon at the inlet and outlet of the add-on control device simultaneously, using Method 25 or 25A in appendix A–7 of part 60. If you are demonstrating compliance with the oxidizer outlet organic HAP concentration limit, only the outlet volatile organic matter concentration must be determined. The outlet volatile organic matter concentration is determined as the average of the three test runs. You may use Method 18 in appendix A–6 of part 60 to subtract methane emissions from measured volatile organic matter concentration as carbon.

* * * * *

■ 37. Section 63.4364 is amended by:

■ a. Revising paragraphs (a)(6) through (8) and (c) introductory text;

■ b. Redesignating paragraphs (c)(i) through (iii) as (c)(1) through (3), respectively; and

■ c. Revising newly redesignated paragraph (c)(1).

The revisions read as follows:

§ 63.4364 What are the requirements for CPMS installation, operation, and maintenance?

(a) * * *

(6) At all times, you must maintain the monitoring system in accordance with § 63.4300(b) and in proper working order including, but not limited to, keeping readily available necessary parts for routine repairs of the monitoring equipment.

(7) Before September 12, 2019, except for monitoring malfunctions, associated repairs, or required quality assurance or control activities (including calibration checks or required zero and span adjustments), you must conduct all monitoring at all times that the unit is operating. On and after September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.4300(b). Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions concentrations and percent reductions specified in Table 1 to this subpart. You must use all the data collected during all other periods in assessing compliance of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(8) Except for periods of required quality assurance or control activities, any averaging period during which the CPMS fails to operate and record data continuously as required by paragraph (a)(1) of this section, or during which generated data cannot be included in calculating averages as specified in paragraph (a)(7) of this section, constitutes a deviation, and you must notify the Administrator in accordance with § 63.4311(a).

* * * * *

(c) *Oxidizers.* If you are using an oxidizer to comply with the emission standards, you must comply with paragraphs (c)(1) through (3) of this section.

(1) Install, calibrate, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months or the chart recorder, data logger, or temperature indicator must be replaced. A thermocouple is considered part of the temperature indicator for purposes of performing periodic calibration and verification checks.

* * * * *

■ 38. Section 63.4371 is amended by revising the definition of ''Deviation'' to read as follows:

§ 63.4371 What definitions apply to this subpart?

* * * * *

Deviation means:

(1) Before September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart

including but not limited to any emission limit, or operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction regardless of whether or not such failure is permitted by this subpart; and

(2) On and after September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, or operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

* * * * *

No organic HAP means no organic HAP in Table 5 to this subpart is present at 0.1 percent by mass or more and no organic HAP not listed in Table 5 to this subpart is present at 1.0 percent by mass or more. The organic HAP content of a regulated material is determined according to § 63.4321(e)(1).

* * * * *

■ 39. Table 3 to subpart OOOO of part 63 is revised to read as follows:

TABLE 3 TO SUBPART OOOO OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART OOOO

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart OOOO	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart OOOO is also specified in § 63.4281.
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart OOOO.
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4371.
§ 63.3(a)–(c)	Units and Abbreviations	Yes	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes	
§ 63.4(b)–(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.4283 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.4283 specifies the compliance dates.
§ 63.6(e)(1)(i)	Operation and Maintenance	Yes, before September 12, 2019.. No, on and after September 12, 2019.	*See* § 63.4300(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Operation and Maintenance	Yes, before September 12, 2019.. No, on and after September 12, 2019.	
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes	
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes, before September 12, 2019.. No, on and after September 12, 2019.	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes, before September 12, 2019.. No, on and after September 12, 2019.	
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards.	No	Subpart OOOO does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes	

TABLE 3 TO SUBPART OOOO OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART OOOO—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart OOOO	Explanation
§ 63.6(j)	Presidential Compliance Exemption	Yes	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4360, 63.4361, and 63.4362.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard.
§ 63.7(a)(3)	Performance Tests Required by the Administrator.	Yes	
§ 63.7(b)–(d)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Conduct of performance tests	Yes, before September 12, 2019.. No, on and after September 12, 2019.	*See* § 63.4360.
§ 63.7(e)(2)–(4)	Conduct of performance tests	Yes	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in § 63.4364.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart OOOO does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes, before September 12, 2019. No, on and after September 12, 2019.	Section 63.4364 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(2)–(3)	CMS Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for CMS operations and maintenance are specified in § 63.4364.
§ 63.8(c)(4)	CMS	No	Section 63.4364 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart OOOO does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.4364 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out of Control Periods	Yes	
§ 63.8(c)(8)	CMS Out of Control Periods and Reporting	No	Section 63.4311 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart OOOO does not require the use of CEMS.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart OOOO does not require the use of CEMS.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.4363 and 63.4364 specify monitoring data reduction.
§ 63.9(a)	Applicability and General Information	Yes	
§ 63.9(b)	Initial Notifications	No	Subpart OOOO provides 1 year for an existing source to submit an initial notification.

TABLE 3 TO SUBPART OOOO OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART OOOO—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart OOOO	Explanation
§ 63.9(c)	Request for Extension of Compliance	Yes	
§ 63.9(d)	Notification that Source is Subject to Special Compliance Requirements.	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart OOOO does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS	No	Subpart OOOO does not require the use of CEMS.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.4310 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes	
§ 63.9(j)	Change in Previous Information	Yes	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional Requirements are specified in §§ 63.4312 and 63.4313.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4312(i)
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet Standards.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4312(i).
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment.	Yes	
§ 63.10(b)(2)(iv)–(v)	Actions Taken to Minimize Emissions During Startup, Shutdown, and Malfunction.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4312(i)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes, before September 12, 2019. No, on and after September 12, 2019..	*See* § 63.4312(i) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)–(xi)	Records	Yes	
§ 63.10(b)(2)(xii)	Records	Yes	
§ 63.10(b)(2)(xiii)		No	Subpart OOOO does not require the use of CEMS.
§ 63.10(b)(2)(xiv)		Yes	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes	
§ 63.10(c)(7)–(8)	Additional Recordkeeping Requirements for Sources with CMS.	No	*See* § 63.4312(i)(1) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(10)–(14)	Additional Recordkeeping Requirements for Sources with CMS.	Yes	
§ 63.10(c)(15)	Records Regarding the Startup, Shutdown, and Malfunction Plan.	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4311.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4311(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart OOOO does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes	

TABLE 3 TO SUBPART OOOO OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART OOOO—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart OOOO	Explanation
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4311(a)(7).
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart OOOO does not require the use of CEMS.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.4311(a) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart OOOO does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart OOOO does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	
§ 63.14	Incorporation by Reference	Yes	ASNI/ASME PTC 19.10–1981, part 10.
§ 63.15	Availability of Information/Confidentiality	Yes	

■ 40. Table 6 to subpart OOOO of part 63 is added to read as follows:

TABLE 6—TO SUBPART OOOO OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS

Chemical name	CAS No.
1,1,2,2-Tetrachloroethane	79–34–5
1,1,2-Trichloroethane	79–00–5
1,1-Dimethylhydrazine	57–14–7
1,2-Dibromo-3-chloropropane	96–12–8
1,2-Diphenylhydrazine	122–66–7
1,3-Butadiene	106–99–0
1,3-Dichloropropene	542–75–6
1,4-Dioxane	123–91–1
2,4,6-Trichlorophenol	88–06–2
2,4/2,6-Dinitrotoluene (mixture)	25321–14–6
2,4-Dinitrotoluene	121–14–2
2,4-Toluene diamine	95–80–7
2-Nitropropane	79–46–9
3,3'-Dichlorobenzidine	91–94–1
3,3'-Dimethoxybenzidine	119–90–4
3,3'-Dimethylbenzidine	119–93–7
4,4'-Methylene bis(2-chloroaniline)	101–14–4
Acetaldehyde	75–07–0
Acrylamide	79–06–1
Acrylonitrile	107–13–1
Allyl chloride	107–05–1
alpha-Hexachlorocyclohexane (a-HCH)	319–84–6
Aniline	62–53–3
Benzene	71–43–2
Benzidine	92–87–5
Benzotrichloride	98–07–7
Benzyl chloride	100–44–7
beta-Hexachlorocyclohexane (b-HCH)	319–85–7
Bis(2-ethylhexyl)phthalate	117–81–7
Bis(chloromethyl)ether	542–88–1
Bromoform	75–25–2
Captan	133–06–2
Carbon tetrachloride	56–23–5
Chlordane	57–74–9
Chlorobenzilate	510–15–6
Chloroform	67–66–3
Chloroprene	126–99–8
Cresols (mixed)	1319–77–3
DDE	3547–04–4
Dichloroethyl ether	111–44–4
Dichlorvos	62–73–7
Epichlorohydrin	106–89–8

TABLE 6—TO SUBPART OOOO OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
Ethyl acrylate	140–88–5
Ethylene dibromide	106–93–4
Ethylene dichloride	107–06–2
Ethylene oxide	75–21–8
Ethylene thiourea	96–45–7
Ethylidene dichloride (1,1-Dichloroethane)	75–34–3
Formaldehyde	50–00–0
Heptachlor	76–44–8
Hexachlorobenzene	118–74–1
Hexachlorobutadiene	87–68–3
Hexachloroethane	67–72–1
Hydrazine	302–01–2
Isophorone	78–59–1
Lindane (hexachlorocyclohexane, all isomers)	58–89–9
m-Cresol	108–39–4
Methylene chloride	75–09–2
Naphthalene	91–20–3
Nitrobenzene	98–95–3
Nitrosodimethylamine	62–75–9
o-Cresol	95–48–7
o-Toluidine	95–53–4
Parathion	56–38–2
p-Cresol	106–44–5
p-Dichlorobenzene	106–46–7
Pentachloronitrobenzene	82–68–8
Pentachlorophenol	87–86–5
Propoxur	114–26–1
Propylene dichloride	78–87–5
Propylene oxide	75–56–9
Quinoline	91–22–5
Tetrachloroethene	127–18–4
Toxaphene	8001–35–2
Trichloroethylene	79–01–6
Trifluralin	1582–09–8
Vinyl bromide	593–60–2
Vinyl chloride	75–01–4
Vinylidene chloride	75–35–4

Subpart RRRR—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture

■ 41. Section 63.4900 is revised to read as follows:

§ 63.4900 What are my general requirements for complying with this subpart?

(a) The affected source must be in compliance at all times with the applicable emission limitations specified in §§ 63.4890, 63.4892, and 63.4893.

(b) Before September 12, 2019, you must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i). On and after September 12, 2019, at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before September 12, 2019, if your affected source uses an emission capture system and add-on control device to comply with the emission limitations in § 63.4890, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The SSMP must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. A startup, shutdown, and malfunction plan is not required on and after September 12, 2019.

■ 42. Section 63.4910 is amended by revising paragraph (c)(9)(v) to read as follows:

§ 63.4910 What notifications must I submit?

* * * * *

(c) * * *

(9) * * *

(v) Before September 12, 2019, a statement of whether or not you developed and implemented the startup, shutdown, and malfunction plan required by § 63.4900. This statement is not required on and after September 12, 2019.

■ 43. Section 63.4920 is amended by revising paragraphs (a)(3) introductory text, (a)(3)(ii), (a)(4), (a)(5) introductory text, (a)(5) through (7), and (c) introductory text to read as follows:

§ 63.4920 What reports must I submit?

(a) * * *

(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (v) of this section, and the information specified in paragraphs (a)(4) through (7) of this section that is applicable to your affected source.

* * * * *

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report. Such certifications must also comply with the requirements of 40 CFR 70.5(d) or 40 CFR 71.5(d).

* * * * *

(4) *No deviations.* If there were no deviations from the emission limits, operating limits, and work practice standards in §§ 63.4890, 63.4892, and 63.4893, respectively, that apply to you, the semiannual compliance report must include an affirmative statement that there were no deviations from the emission limits, operating limits, or work practice standards in §§ 63.4890, 63.4892, and 63.4893 during the reporting period. If there were no deviations from these emission limitations, the semiannual compliance report must include the affirmative statement that is described in either § 63.4942(c), § 63.4952(c), or § 63.4962(f), as applicable. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period as specified in § 63.8(c)(7).

(5) *Deviations: Compliant material option.* If you used the compliant material option, and there was a deviation from the applicable emission limit in § 63.4890, the semiannual compliance report must contain the information in paragraph (a)(5)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(5)(i)(A) through (D) of this section.

(A) Identification of each coating used that deviated from the emission limit, and of each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(B) The calculation of the organic HAP content for each coating identified in paragraph (a)(5)(i) of this section, using Equation 2 of § 63.4941. You do not need to submit background data supporting this calculation, for example, information provided by materials suppliers or manufacturers, or test reports.

(C) The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by materials suppliers or manufacturers, or test reports.

(D) A statement of the cause of each deviation.

(ii) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4890, the semiannual compliance report must contain the information in paragraphs (a)(5)(ii)(A) through (E) of this section.

(A) Identification of each coating used that deviated from the emission limit, and of each thinner and cleaning material used that contained organic HAP, and the date, time, and duration each was used.

(B) The calculation of the organic HAP content for each coating identified in paragraph (a)(5)(ii)(A) of this section, using Equation 2 of § 63.4941. You do not need to submit background data supporting this calculation, for example, information provided by materials suppliers or manufacturers, or test reports.

(C) The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified in paragraph (a)(5)(ii)(A) of this section. You do not need to submit background data supporting this calculation, for example, information provided by materials suppliers or manufacturers, or test reports.

(D) A statement of the cause of each deviation (including unknown cause, if applicable).

(E) The number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4890, and a description of the method used to estimate the emissions.

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option, and there was a deviation from any applicable emission limit in § 63.4890, the semiannual compliance report must contain the information in paragraph (a)(6)(i) or (ii) of this section, as applicable. You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers, or test reports.

(i) Before September 12, 2019, the information in paragraphs (a)(6)(i)(A) through (E) of this section.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.

(B) The calculation of the total mass of organic HAP emissions for each month, using Equations 1 of § 63.4951.

(C) The calculation of the total volume of coating solids used each month, using Equation 2 of § 63.4951.

(D) The calculation of the organic HAP emission rate for each month, using Equation 3 of § 63.4951.

(E) A statement of the cause of each deviation.

(ii) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4890, the semiannual compliance report must contain the information in paragraphs (a)(6)(ii)(A) through (F) of this section.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.

(B) The calculation of the total mass of organic HAP emissions for each month, using Equation 1 of § 63.4951.

(C) The calculation of the total volume of coating solids used each month, using Equation 2 of § 63.4951.

(D) The calculation of the organic HAP emission rate for each month, using Equation 3 of § 63.4951.

(E) A statement of the cause of each deviation (including unknown cause, if applicable).

(F) The number of deviations, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4890, and a description of the method used to estimate the emissions.

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option, and there was a deviation from any applicable emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraph (a)(7)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(7)(i)(A) through (Q) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred. You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers, or test reports.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.

(B) The calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during each month, using Equation 1 of § 63.4951 and, if applicable, the calculation used to determine the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during each compliance period, according to § 63.4951(e)(4).

(C) The calculation of the total volume of coating solids used, using Equation 2 of § 63.4951.

(D) The calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equation 1 of § 63.4961, and Equation 3 of § 63.4961 for the calculation of the mass of organic HAP emission reduction for the coating operation controlled by solvent recovery systems each compliance period, as applicable.

(E) The calculation of the organic HAP emission rate for each compliance period, using Equation 4 of § 63.4961.

(F) The date and time that each malfunction started and stopped.

(G) A brief description of the CPMS.

(H) The date of the latest CPMS certification or audit.

(I) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(J) The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8).

(K) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(L) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total affected source operating time during that semiannual reporting period.

(M) A breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(N) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total affected source operating time during that semiannual reporting period.

(O) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(P) For each deviation from the work practice standards, a description of the deviation; the date and time period of the deviation; and the actions you took to correct the deviation.

(Q) A statement of the cause of each deviation.

(ii) On and after September 12, 2019, the information in paragraphs (a)(7)(ii)(A) through (O), (Q), and (R) of this section if there was a deviation from the applicable emission limit in § 63.4890 or the applicable operating limit(s) in Table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere) and the information in paragraph (a)(7)(ii)(P) of this section if there was a deviation from the work practice standards in § 63.4893(b).

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.

(B) The calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during each month, using Equation 1 of § 63.4951 and, if applicable, the calculation used to determine the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during each compliance period, according to § 63.4951(e)(4).

(C) The calculation of the total volume of coating solids used, using Equation 2 of § 63.4951.

(D) The calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equation 1 of § 63.4961, and Equation 3 of § 63.4961 for the calculation of the mass of organic HAP emission reduction for the coating operation controlled by solvent recovery systems each compliance period, as applicable.

(E) The calculation of the organic HAP emission rate for each compliance period, using Equation 4 of § 63.4961.

(F) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

(G) A brief description of the CPMS.

(H) The date of the latest CPMS certification or audit.

(I) For each instance that the CPMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative, and descriptions of corrective actions taken.

(J) For each instance that the CPMS was out-of-control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(K) The date, time, and duration of each deviation from an operating limit in Table 1 to this subpart; and the date, time, and duration of any bypass of the add-on control device.

(L) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total affected source operating time during that semiannual reporting period.

(M) A breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(N) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total affected source operating time during that semiannual reporting period.

(O) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control

device since the last semiannual reporting period.

(P) For deviations from the work practice standards in § 63.4893(b), the number of deviations, and, for each deviation: A description of the deviation; the date, time, and duration of the deviation; and the actions taken to minimize emissions in accordance with § 63.4900(b). The description of the deviation must include a list of the affected sources or equipment for which a deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(Q) For deviations from an emission limit in § 63.4890 or operating limit in Table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(R) For each deviation from an emission limit in § 63.4890 or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4890, and a description of the method used to estimate the emissions.

* * * * *

(c) Before September 12, 2019, if you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. The reports specified in paragraphs (c)(1) and (2) of this section are not required on and after September 12, 2019.

* * * * *

■ 44. Section 63.4921 is added to read as follows:

§ 63.4921 What are my electronic reporting requirements?

(a) Beginning no later than June 13, 2019, you must submit the results of the performance test required § 63.4920(b) following the procedure specified in paragraphs (a)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website147 (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (a)(1) of this section is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(b) Beginning on March 15, 2021, the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.4910(c) to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (*https://cdx.epa.gov*). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the extensible markup language (XML) schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(c) Beginning on March 15, 2021, or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in § 63.4920 to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (*https://cdx.epa.gov*).). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(d) If you are required to electronically submit a report through CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within

the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(e) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

■ 45. Section 63.4930 is amended by revising paragraphs (j), (k) introductory text, and (k)(1) and (2) to read as follows:

§ 63.4930 What records must I keep?

* * * * *

(j) Before September 12, 2019, you must keep records of the date, time, and duration of each deviation. On and after September 12, 2019, for each deviation from an emission limitation reported under § 63.4920(a)(5) through (7), you must keep a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.4920(a)(5) through (7).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.4920(a)(5) through (7).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4890 or any applicable operating limit(s) in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.4920(a)(5) through (7).

(4) A record of actions taken to minimize emissions in accordance with § 63.4900(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(k) If you use the emission rate with add-on controls option, you must also keep the records specified in paragraphs (k)(1) through (8) of this section.

(1) Before September 12, 2019, for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. The record in this paragraph (k)(1) is not required on and after September 12, 2019.

(2) Before September 12, 2019, the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. The records in this paragraph (k)(2) are not required on and after September 12, 2019.

* * * * *

■ 46. Section 63.4931 is amended by revising paragraph (a) to read as follows:

§ 63.4931 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. Any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

* * * * *

■ 47. Section 63.4941 is amended by revising paragraphs (a)(1)(i), (a)(2) and (4), and (b)(1), the definitions of ''$M_{volatiles}$'' and ''D_{avg}'' in Equation 1 in paragraph (b)(3), and paragraphs (c) and (e) to read as follows:

§ 63.4941 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(a) * * *

(1) * * *

(i) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (for example, 0.3791).

* * * * *

(2) *Method 24 in appendix A–7 of part 60.* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using Method 24, you may use ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14).

* * * * *

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP in Table 5 to this subpart that is present at 0.1 percent by mass or

more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence.

* * * * *

(b) * * *

(1) *Test results.* You may use ASTM D2697–03 (R2014), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings'', or D6093–97 (R2016), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer'' (both incorporated by reference, *see* § 63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids. Alternatively, you may use another test method once you obtain approval from the Administrator according to the requirements of § 63.7(f).

* * * * *

(3) * * *

$M_{volatiles}$ = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A–7 of part 60, or according to ASTM D2369—10 (R2015) Standard Test Method for Volatile Content of Coatings (incorporated by reference, *see* § 63.14), grams volatile matter per liter coating.

D_{avg} = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products'' (incorporated by reference, *see* § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM D1475–13 test results and other information sources, the test results will take precedence.

(c) *Determine the density of each coating.* You must determine the density of each coating used during the compliance period from test results using ASTM D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products'' (incorporated by reference, *see* § 63.14), or information from the supplier or manufacturer of the material. If there is disagreement between ASTM D1475–13 test results and the supplier's or manufacturer's information, the test results will take precedence.

* * * * *

(e) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in § 63.4890 and each thinner and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§ 63.4930 and 63.4931. As part of the Notification of Compliance Status required in § 63.4910(c) and the semiannual compliance reports required in § 63.4920, you must identify each coating operation and group of coating operations for which you used the compliant material option. If there were no deviations from the emission limit, include a statement that each coating operation was in compliance with the emission limitations during the initial compliance period because it used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4890, and it used no thinners or cleaning materials that contained organic HAP.

■ 48. Section 63.4951 is amended by revising paragraph (c) to read as follows:

§ 63.4951 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(c) *Determine the density of each material.* You must determine the density of each coating, thinner, and cleaning material used during the compliance period according to the requirements in § 63.4941(c).

* * * * *

■ 49. Section 63.4960 is amended by revising the section heading to read as follows:

§ 63.4960 By what date must I conduct initial performance tests and other initial compliance demonstrations?

* * * * *

■ 50. Section 63.4961 is amended by revising paragraphs (h) introductory text and (j)(3) to read as follows:

§ 63.4961 How do I demonstrate initial compliance?

* * * * *

(h) *Calculate the organic HAP emission reduction for controlled coating operations not using liquid-liquid material balance.* For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction, using Equation 1 of this section. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4962(c) or (d) occurs in the controlled coating operation, you must assume zero efficiency for the emission capture system and add-on control device. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation:

$$H_R = (A_I + B_I + C_I - R_w)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) + H_{unc} \qquad \text{(Eq. 1)}$$

Where:

H_R = Mass of organic HAP emission reduction for the controlled coating operation during the compliance period, kg.

A_I = Total mass of organic HAP in the coatings used in the controlled coating operation during the compliance period, excluding coatings used during deviations, kg, as calculated in Equation 1A of this section.

B_I = Total mass of organic HAP in the thinners used in the controlled coating operation during the compliance period, excluding thinners used during deviations, kg, as calculated in Equation 1B of this section.

C_I = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the compliance period, excluding cleaning materials used during deviations, kg, as calculated in Equation 1C of this section.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment

or disposal during the compliance period, kg, determined according to § 63.4951(e)(4). The mass of any waste material reused during the same compliance period may not be included in R_w. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.4963 and 63.4964 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.4963 and 63.4965 to measure and record the organic HAP destruction or removal efficiency.

H_{unc} = Total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations specified in § 63.4962(c) and (d) that occurred during the compliance period in the controlled coating operation, kg, as calculated in Equation 1D of this section.

* * * * *

(j) * * *

(3) Determine the mass fraction of volatile organic matter for each coating, thinner, and cleaning material used in the coating operation controlled by the solvent recovery system during the compliance period. You may determine the volatile organic matter mass fraction using Method 24 in appendix A–7 of part 60, ASTM D2369–10 (R2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, *see* § 63.14), or an EPA-approved alternative method. Alternatively, you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24, ASTM D2369–10 (R2015), or an approved alternative method, the test method results will govern.

* * * * *

■ 51. Section 63.4962 is amended by revising the section heading and paragraph (c) introductory text and adding paragraph (c)(3) to read as follows:

§ 63.4962 How do I conduct periodic performance tests and demonstrate continuous compliance with the emission limitations?

* * * * *

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4892 that applies to you, as specified in Table 1 to this subpart, and you must conduct periodic performance tests as specified in paragraph (c)(3) of this section.

* * * * *

(3) Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4961(j), within 5 years following the previous performance test, you must conduct according to the procedures in §§ 63.4963, 63.4964, and 63.4965 a periodic performance test of each capture system and add-on control device used, and you must establish the operating limits required by § 63.4892. You must conduct the first periodic performance test and establish the operating limits required by § 63.4892 before March 15, 2022, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after March 15, 2017. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test.

* * * * *

■ 52. Section 63.4963 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§ 63.4963 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §§ 63.4960 and 63.4962 according to the requirements in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

■ 53. Section 63.4965 is amended by revising paragraphs (a)(1) through (4) and paragraph (b) to read as follows:

§ 63.4965 How do I determine the add-on control device emission destruction or removal efficiency?

* * * * *

(a) * * *

(1) Use Method 1 or 1A in appendix A–1 of part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F in appendix A–1, or Method 2G in appendix A–2, of part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B in appendix A–2 of part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]'' (incorporated by reference, *see* § 63.14).

(4) Use Method 4 in appendix A–3 of part 60 to determine stack gas moisture.

* * * * *

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A in appendix A–7 of part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements. You may use Method 18 in appendix A–6 of part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

* * * * *

■ 54. Section 63.4966 is amended by revising the section heading, introductory text, and paragraph (e)(1) to read as follows:

§ 63.4966 How do I establish the emission capture system and add-on control device operating limits during performance tests?

During the performance tests required by §§ 63.4960 and 63.4962, and described in §§ 63.4963, 63.4964, and 63.4965, you must establish the operating limits required by § 63.4892 according to this section, unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.4892.

* * * * *

(e) * * *

(1) During the capture efficiency determination required by §§ 63.4960 and 63.4962, and described in §§ 63.4963 and 63.4964, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in

the duct between the capture device and the add-on control device inlet.

* * * * *

■ 55. Section 63.4967 is amended by revising paragraphs (a)(4) and (5) and (c)(3) introductory text to read as follows:

§ 63.4967 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) * * *

(4) You must maintain the CPMS at all times in accordance with § 63.4900(b) and have readily available necessary parts for routine repairs of the monitoring equipment.

(5) Before September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, repairs to correct the monitor malfunctions, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments). On and after September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.4900(b).

* * * * *

(c) * * *

(3) For each gas temperature monitoring device, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (vi) of this section for each gas temperature monitoring device. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

* * * * *

■ 56. Section 63.4981 is amended by revising the definition for ''Deviation'' to read as follows:

§ 63.4981 What definitions apply to this subpart?

* * * * *

Deviation means:

(1) Before September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, or operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction regardless of whether or not such failure is permitted by this subpart; and

(2) On and after September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, or operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

* * * * *

■ 57. Table 2 to subpart RRRR of part 63 is revised to read as follows:

TABLE 2 TO SUBPART RRRR OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART RRRR

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart RRRR is also specified in § 63.4881.
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart RRRR.
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4981.
§ 63.3(a)–(c)	Units and Abbreviations	Yes	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes	
§ 63.4(b)–(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.4883 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.4883 specifies the compliance dates.
§ 63.6(e)(1)(i)	Operation and Maintenance	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4900(b) for general duty requirement.

TABLE 2 TO SUBPART RRRR OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART RRRR—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart	Explanation
§ 63.6(e)(1)(ii)	Operation and Maintenance	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes	
§ 63.6(e)(3)	Startup, shutdown, and malfunction Plan (SSMP).	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes	
§ 63.6(g)(1)–(3)	Use of Alternative Standards	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards.	No	Subpart RRRR does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes	
§ 63.6(j)	Presidential Compliance Exemption	Yes	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources using an add-on control device to comply with the standards. Additional requirements for performance testing are specified in §§ 63.4963, 63.4964, and 63.4965.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4960 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required by the Administrator.	Yes	
§ 63.7(b)–(d)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.7(e)(1)	Conduct of performance tests	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4963(a).
§ 63.7(e)(2)–(4)	Conduct of performance tests	Yes.	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in § 63.4967.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart RRRR does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.8(c)(2)–(3)	CMS Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for CMS operations and maintenance are specified in § 63.4967.

TABLE 2 TO SUBPART RRRR OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART RRRR—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart	Explanation
§ 63.8(c)(4)	CMS	No	Section 63.4967 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart RRRR does not have opacity or visible emissions standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.4967 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes	
§ 63.8(c)(8)	CMS Out-of-Control Periods Reporting	No	Section 63.4920 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart RRRR does not require the use of CEMS.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes..	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart RRRR does not require the use of CEMS.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.4966 and 63.4967 specify monitoring data reduction.
§ 63.9(a)–(d)	Notification Requirements	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart RRRR does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS	No	Subpart RRRR does not require the use of CEMS.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.4910 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes	
§ 63.9(j)	Change in Previous Information	Yes	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4930 and 63.4931.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4930(j).
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet Standards.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4930(j).
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment.	Yes	
§ 63.10(b)(2)(iv)– (v)	Actions Taken to Minimize Emissions During SSM.	Yes, before September 12, 2019.. No, on and after September 12, 2019.	*See* § 63.4930(j)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4930(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)–(xi)	Records	Yes	
§ 63.10(b)(2)(xii)	Records	Yes	
§ 63.10(b)(2)(xiii)		No	Subpart RRRR does not require the use of CEMS.
§ 63.10(b)(2)(xiv)		Yes	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes	
§ 63.10(c)(7)–(8)	Additional Recordkeeping Requirements for Sources with CMS.	No	*See* § 63.4930(j)(1) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.

TABLE 2 TO SUBPART RRRR OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART RRRR—Continued

[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart	Explanation
§ 63.10(c)(10)–(14)	Additional Recordkeeping Requirements for Sources with CMS.	Yes	
§ 63.10(c)(15)	Records Regarding the SSMP	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4920.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4920(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart RRRR does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes, before September 12, 2019. No, on and after September 12, 2019.	*See* § 63.4920(a)(7).
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart RRRR does not require the use of CEMS.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.4920(a) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart RRRR does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart RRRR does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	
§ 63.14	Incorporation by Reference	Yes	
§ 63.15	Availability of Information/Confidentiality	Yes	

■ 58. Table 5 to subpart RRRR of part 63 is added to read as follows:

TABLE 5 TO SUBPART RRRR OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS

Chemical name	CAS No.
1,1,2,2-Tetrachloroethane	79–34–5
1,1,2-Trichloroethane	79–00–5
1,1-Dimethylhydrazine	57–14–7
1,2-Dibromo-3-chloropropane	96–12–8
1,2-Diphenylhydrazine	122–66–7
1,3-Butadiene	106–99–0
1,3-Dichloropropene	542–75–6
1,4-Dioxane	123–91–1
2,4,6-Trichlorophenol	88–06–2
2,4/2,6-Dinitrotoluene (mixture)	25321–14–6
2,4-Dinitrotoluene	121–14–2
2,4-Toluene diamine	95–80–7
2-Nitropropane	79–46–9
3,3'-Dichlorobenzidine	91–94–1
3,3'-Dimethoxybenzidine	119–90–4
3,3'-Dimethylbenzidine	119–93–7
4,4'-Methylene bis(2-chloroaniline)	101–14–4
Acetaldehyde	75–07–0
Acrylamide	79–06–1
Acrylonitrile	107–13–1
Allyl chloride	107–05–1
alpha-Hexachlorocyclohexane (a-HCH)	319–84–6
Aniline	62–53–3
Benzene	71–43–2
Benzidine	92–87–5
Benzotrichloride	98–07–7
Benzyl chloride	100–44–7
beta-Hexachlorocyclohexane (b-HCH)	319–85–7

TABLE 5 TO SUBPART RRRR OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
Bis(2-ethylhexyl)phthalate	117–81–7
Bis(chloromethyl)ether	542–88–1
Bromoform	75–25–2
Captan	133–06–2
Carbon tetrachloride	56–23–5
Chlordane	57–74–9
Chlorobenzilate	510–15–6
Chloroform	67–66–3
Chloroprene	126–99–8
Cresols (mixed)	1319–77–3
DDE	3547–04–4
Dichloroethyl ether	111–44–4
Dichlorvos	62–73–7
Epichlorohydrin	106–89–8
Ethyl acrylate	140–88–5
Ethylene dibromide	106–93–4
Ethylene dichloride	107–06–2
Ethylene oxide	75–21–8
Ethylene thiourea	96–45–7
Ethylidene dichloride (1,1-Dichloroethane)	75–34–3
Formaldehyde	50–00–0
Heptachlor	76–44–8
Hexachlorobenzene	118–74–1
Hexachlorobutadiene	87–68–3
Hexachloroethane	67–72–1
Hydrazine	302–01–2
Isophorone	78–59–1
Lindane (hexachlorocyclohexane, all isomers)	58–89–9
m-Cresol	108–39–4
Methylene chloride	75–09–2
Naphthalene	91–20–3
Nitrobenzene	98–95–3
Nitrosodimethylamine	62–75–9
o-Cresol	95–48–7
o-Toluidine	95–53–4
Parathion	56–38–2
p-Cresol	106–44–5
p-Dichlorobenzene	106–46–7
Pentachloronitrobenzene	82–68–8
Pentachlorophenol	87–86–5
Propoxur	114–26–1
Propylene dichloride	78–87–5
Propylene oxide	75–56–9
Quinoline	91–22–5
Tetrachloroethene	127–18–4
Toxaphene	8001–35–2
Trichloroethylene	79–01–6
Trifluralin	1582–09–8
Vinyl bromide	593–60–2
Vinyl chloride	75–01–4
Vinylidene chloride	75–35–4

[FR Doc. 2019–03560 Filed 3–14–19; 8:45 am]

BILLING CODE 6560–50–P

the Local Notice to Mariners and marine information broadcasts. If the COTP determines that a safety zone need not be enforced for the full duration stated in this notice, a Broadcast Notice to Mariners may be used to grant general permission to enter the safety zone.

Dated: February 14, 2018.

M. H. Day,

Captain, U.S. Coast Guard, Captain of the Port New York.

[FR Doc. 2018–05607 Filed 3–19–18; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2016–0069; FRL–9975–62–OAR]

RIN 2060–AT17

Revisions to Method 301: Field Validation of Pollutant Measurement Methods From Various Waste Media

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is publishing editorial and technical revisions to the EPA's Method 301 ''Field Validation of Pollutant Measurement Methods from Various Waste Media'' to correct and update the method. In addition, the EPA is clarifying the regulatory applicability of Method 301 as well as its suitability for use with other regulations. The revisions include ruggedness testing for validation of test methods intended for application at multiple sources, determination of the limit of detection for all method validations, incorporating procedures for determining the limit of detection, revising the sampling requirements for the method comparison procedure, adding storage and sampling procedures for sorbent sampling systems, and clarifying acceptable statistical results for candidate test methods. We are also clarifying the applicability of Method 301 to our regulations and adding equations to clarify calculation of the correction factor, standard deviation, estimated variance of a validated test method, standard deviation of differences, and t-statistic for all validation approaches. We have also made minor changes in response to public comments. Changes made to the Method 301 field validation protocol under this action apply only to methods submitted to the EPA for approval after the effective date of this final rule.

DATES: The final rule is effective on March 20, 2018.

ADDRESSES: We have established a docket for this rulemaking under Docket ID Number EPA–HQ–OAR–2016–0069. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Robin Segall, Office of Air Quality Planning and Standards, Air Quality Assessment Division (E143–02), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541–0893; fax number: (919) 541–0516; email address: *segall.robin@epa.gov.*

SUPPLEMENTARY INFORMATION: The information in this preamble is organized as follows:

Table of Contents

I. General Information

A. Does this action apply to me?

Method 301 applies to you, under 40 CFR 63.7(f) or 40 CFR 65.158(a)(2)(iii), when you want to use an alternative to a required test method to meet an applicable requirement or when there is no required or validated test method. In addition, the validation procedures of Method 301 may be used as a tool for demonstration of the suitability of alternative test methods under 40 CFR 59.104 and 59.406, 40 CFR 60.8(b), and 40 CFR 61.13(h)(1)(ii). If you have questions regarding the applicability of the changes to Method 301, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of the method revisions is available on the Air Emission Measurement Center (EMC) website at *https://www.epa.gov/emc/.* The EMC provides information regarding stationary source air emissions test methods and procedures.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by May 21, 2018. Under CAA section 307(b)(2), the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA provides that ''[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.'' This section also provides a mechanism for the EPA to reconsider the rule ''[i]f the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.'' Any person seeking to make such a demonstration should submit a

Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

The EPA proposed revisions to Method 301 on December 2, 2016 (81 FR 87003). The EPA received one comment letter on the proposed revisions to EPA Method 301, which is addressed in Section IV of this preamble.

The EPA originally published Method 301 (appendix A to 40 CFR part 63, Test Methods) on December 29, 1992 (57 FR 61970), as a field validation protocol method to be used to validate new test methods for hazardous air pollutants (HAP) in support of the Early Reductions Program of part 63 when existing test methods were inapplicable. On March 16, 1994, the EPA incorporated Method 301 into 40 CFR 63.7 (59 FR 12430) to provide procedures for validating a candidate test method as an alternative to a test method specified in a standard or for use where no test method is provided in a standard.

Method 301 specifies procedures for determining and documenting the bias and precision of a test method that is a candidate for use as an alternative to a test method specified in an applicable regulation. Method 301 has also been required for validating test methods to be used in demonstrating compliance with a regulatory standard in the absence of a validated test method. Method 301 is required for these purposes under 40 CFR 63.7(f) and 40 CFR 65.158(a)(2)(iii), and is an appropriate tool for demonstration and validation of alternative methods under 40 CFR 59.104 and 59.406, 40 CFR 60.8(b), and 40 CFR 61.13(h)(1)(ii). The procedures specified in Method 301 are applicable to various media types (*e.g.,* sludge, exhaust gas, wastewater).

Bias (or systemic error) is established by comparing measurements made using a candidate test method against reference values, either reference materials or a validated test method. Where needed, a correction factor for source-specific application of the method is employed to eliminate/minimize bias. This correction factor is established from data obtained during the validation test. Methods that have bias correction factors outside a specified range are considered unacceptable. Method precision (or random error) must be demonstrated to be as precise as the validated method for acceptance or less than or equal to 20 percent when the candidate method is being evaluated using reference materials.

Neither the Method as originally established on December 29, 1992, nor the subsequent revision on May 18, 2011 (76 FR 28664), have distinguished requirements for single-source applications of a candidate method from those that apply at multiple sources. The revisions promulgated in this action recognize that requirements related to bias and ruggedness testing should differ between single-source and multiple-source application of an alternative method. Additionally, through our reviews of submitted Method 301 data packages and response to questions from industry, technology vendors, and testing organizations seeking to implement the method, we recognized that there was confusion with the specific testing requirements and the statistical calculations associated with each of the three ''Sampling Procedures.'' To improve the readability and application of Method 301, we proposed and are finalizing minor edits throughout the method text to clarify the descriptions and requirements for assessing bias and precision for each ''Sampling Procedure'' and have added equations to ensure that required calculations and acceptance criteria for each of the three sampling approaches are clear.

III. Summary of Final Amendments

In this section, we discuss the final amendments to Method 301, the changes since proposal, and the rationale for the changes. We are finalizing clarifications to the regulatory applicability of Method 301 and its suitability for use with other regulations, as well as finalizing technical revisions and editorial changes intended to clarify and update the requirements and procedures specified in Method 301.

A. Technical Revisions

1. Applicability of Ruggedness Testing and Limit of Detection Determination

In this action, we are amending sections 3.1 and 14.0 to require ruggedness testing when using Method 301 to validate a candidate test method intended for application to multiple sources. Ruggedness testing is optional for validation of methods intended for single-source applications. We are also amending sections 3.1 and 15.0 to require determination of the limit of detection (LOD) for validation of all methods (*i.e.,* those intended for both single-source and multi-source application). Additionally, we are clarifying the LOD definition in section 15.1.

Ruggedness testing of a test method is a laboratory study to determine the sensitivity of the method by measuring its capacity to remain unaffected by small, but deliberate variations in method parameters such as sample collection rate and sample recovery temperature to provide an indication of its reliability during normal usage. Requiring ruggedness testing and determination of the LOD for validation of a candidate test method that is intended for use at multiple sources will further inform the EPA's determination of whether the candidate test method is valid across a range of source emission matrices, varying method parameters, and conditions. Additionally, conducting an LOD determination for both single- and multi-source validations will account for the sensitivity of the candidate test method to ensure it meets applicable regulatory requirements.

2. Limit of Detection Procedures

In this action, the EPA is finalizing revisions to the requirements for determining the LOD specified in section 15.2 and Table 301–5 (Procedure I) of Method 301 to reference the procedures for determining the method detection limit (MDL) in 40 CFR part 136, appendix B, as revised on August 28, 2017 (82 FR 40836), which addresses laboratory blank contamination and accounts for intra-laboratory variability. Procedure I of Table 301–5 of Method 301 is used for determining an LOD when an analyte in a sample matrix is collected prior to an analytical measurement or the estimated LOD is no more than twice the calculated LOD. For the purposes of Method 301, LOD will now be equivalent to the calculated MDL determined using the procedures specified in 40 CFR part 136, appendix B.

When EPA proposed revisions to Method 301 (81 FR 87003; December 2, 2016), we noted in the preamble that the Method 301 revisions were referencing *proposed* revisions to the MDL calculation procedures of 40 CFR part 136, appendix B. At that time, we stated, ''If the revisions to 40 CFR part 136, appendix B are finalized as proposed prior to a final action on this [Method 301] proposal, we will cross-reference appendix B. If appendix B is finalized before this action and the

revisions do not incorporate the procedures as described above, the EPA intends to incorporate the specific procedures for determining the LOD in the final version of Method 301 consistent with this proposal.'' The appendix B provisions of 40 CFR part 136 were recently finalized with the Clean Water Act Methods Update Rule on August 28, 2017 (82 FR 40836). As a result of comments on the proposed Methods Update rule, there were minor clarifications, but ''[n]o significant revisions were made to the proposed MDL procedure'' of appendix B as stated in Section III.I of the preamble to that rule. Because the Methods Update rule containing the MDL procedure was finalized with no significant changes, and we have determined that the final requirements of appendix B are appropriate for the CAA programs at issue, we are cross-referencing the finalized MDL determination calculation procedure of 40 CFR part 136, appendix B, in section 15.2 and Table 301–5 of Method 301.

3. Storage and Sampling Procedures

In this action, we are finalizing the proposed revisions to sections 9.0 and 11.1.3 and Table 301–1 of Method 301 to require, at a minimum, six sets of quadruplicate samples (a total of 24 samples) for comparison of a candidate method against a validated method rather than four sets of quadruplicate samples or nine sets of paired samples, as currently required. These revisions ensure that the bias and precision requirements are consistent between the various sampling approaches in the method and decreases the amount of uncertainty in the calculations for bias and precision when comparing an alternative or candidate test method with a validated method. Bias and precision (standard deviation and variance) are inversely related to the number of sampling trains (sample results) used to estimate the difference between the alternative test method and the validated method. As the number of trains increases, the uncertainty in the bias and precision estimates decreases. Larger data sets provide better estimates of the standard deviation or variance and the distribution of the data. The revision to collect a total of 24 samples when using the comparison against a validated method approach is also consistent with the number of samples required for both the analyte spiking and the isotopic spiking approaches. The 12 samples collected when conducting the isotopic spiking approach are equivalent to the 24 samples collected using the analyte spiking approach because the isotopic labelling of the spike allows each of the 12 samples to yield two results (one result for an unspiked sample, and one result for a spiked sample).

For validations conducted by comparing the candidate test method to a validated test method, we are also finalizing the following additions: (1) Storage and sampling procedures for sorbent systems requiring thermal desorption to Table 301–2 of Method 301, and (2) a new Table 301–4 of Method 301 to provide a look-up table of F values for the one-sided confidence level used in assessing the precision of the candidate test method. We also are amending the reference list in section 18.0 to include the source of the F values in Table 301–4.

4. Bias Criteria for Multi-Source Versus Single-Source Validation

In this action, we are finalizing revisions that clarify sections 8.0, 10.3, and 11.1.3 of Method 301 to specify that candidate test methods intended for use at multiple sources must have a bias less than or equal to 10 percent. Candidate test methods with a bias greater than 10 percent, but less than 30 percent, are applicable only at the source at which the validation testing was conducted, and data collected in the future must be adjusted for bias using a source-specific correction factor. A single-source correction factor is not appropriate for use at multiple sources. This change provides flexibility for source-specific Method 301 application while limiting the acceptance criteria for use of the method at multiple sources.

5. Relative Standard Deviation Assessment

In sections 9.0 and 12.2 of Method 301, we are finalizing language regarding the interpretation of the relative standard deviation (RSD) when determining the precision of a candidate test method using the analyte spiking or isotopic spiking procedures. For a test method to be acceptable, we proposed that the RSD of a candidate test method must be less than or equal to 20 percent. Accordingly, we are removing the sampling provisions for cases where the RSD is greater than 20 percent, but less than 50 percent. Poor precision makes it difficult to detect potential bias in a test method. For this reason, we proposed and are now finalizing an acceptance criterion of less than or equal to 20 percent for analyte and isotopic spiking sampling procedures.

6. Applicability of Method 301

Although 40 CFR 65.158(a)(2)(iii) specifically cross-references Method 301, Method 301 formerly did not reference part 65. For parts 63 and 65, Method 301 must be used for establishing an alternative test method. Thus, in this action, we are finalizing language that clarifies that Method 301 is applicable to both parts 63 and 65 and that Method 301 may be used for validating alternative test methods under the following parts of Title 40 of the CAA:

- Part 59 (National Volatile Organic Compound Emission Standards for Consumer and Commercial Products).
- Part 60 (Standards of Performance for New Stationary Sources).
- Part 61 (National Emission Standards for Hazardous Air Pollutants).

We believe that the Method 301 procedures for determining bias and precision provide a suitable technical approach for assessing candidate or alternative test methods for use under these regulatory parts because the testing provisions are very similar to those under parts 63 and 65. To accommodate the expanded applicability and suitability, we are revising the references in sections 2.0, 3.2, 5.0, 13.0, 14.0, and 16.1 of Method 301 to refer to all five regulatory parts.

7. Equation Additions

In this action, we are clarifying the procedures in Method 301 by adding the following equations:

- Equation 301–8 in section 10.3 for calculating the correction factor.
- Equation 301–11 in section 11.1.1 and Equation 301–19 in section 12.1.1 for calculating the numerical bias.
- Equation 301–12 in section 11.1.2 and Equation 301–20 in section 12.1.2 for determining the standard deviation of differences.
- Equation 301–13 in section 11.1.3 and Equation 301–21 in section 12.1.3 for calculating the t-statistic.
- Equation 301–15 in section 11.2.1 to estimate the variance of the validated test method.
- Equation 301–23 in section 12.2 for calculating the standard deviation.

We also are revising the denominator of Equation 301–22 to use the variable ''CS'' rather than ''VS.'' Additionally, we are revising the text of Method 301, where needed, to list and define all variables used in the method equations. These changes are intended to improve the readability of the method and ensure that required calculations and acceptance criteria for each of the three validation approaches in Method 301 are clear.

B. Clarifying and Editorial Changes

In this action, we are applying minor edits throughout the text of Method 301 to clarify the descriptions and

requirements for assessing bias and precision, to ensure consistency when referring to citations within the method, to renumber equations and tables (where necessary), and to remove passive voice.

In addition, we are clarifying several definitions in section 3.2. In the definition of ''Paired sampling system,'' we are modifying the definition to provide that a paired sampling system is collocated with respect to sampling time and location. For the definition of ''Quadruplet sampling system,'' we are replacing the term ''Quadruplet'' with ''Quadruplicate'' and adding descriptive text to the definition to provide examples of replicate samples. We are also making companion edits throughout the method text to reflect the change in terminology from ''quadruplet'' to ''quadruplicate.'' Additionally, we are revising the definition of ''surrogate compound'' to clarify that a surrogate compound must be distinguishable from other compounds being measured by the candidate method.

We are also replacing the term ''alternative test method'' with ''candidate test method'' in section 3.2 and throughout Method 301 to maintain consistency when referring to a test method that is subject to the validation procedures specified in Method 301.

Additionally, the EPA is making the following updates and corrections:

- Updating the address for submitting waivers in section 17.2.
- Correcting the t-value for four degrees of freedom in Table 301–3 ''Critical Values of t'' as well as expanding the table to include t-values up to 20 degrees of freedom. We originally proposed expanding the table to only 11 degrees of freedom, but recognized that users may occasionally want to use significantly more than the minimum number of test runs and samples.
- Including a Table 301–4 ''Upper Critical Values of the F Distribution'' and an associated reference in section 18.0 to provide method users with convenient access to the F values needed to perform the required statistical calculations in Method 301. For the same reason that we originally included the Table 301–3 ''Critical Values of t'' in the 2011 revisions to Method 301, we recognized in finalizing the proposed revisions that we should additionally include a table for the F distribution.

IV. Response to Comment

We received one public comment letter submitted on behalf of the Utility Air Regulatory Group presenting two comments.

Comment: The commenter notes that section 6.4.1 of Method 301 requires that the probe tips for each of the paired sampling probes be 2.5 centimeters away from each other with a pitot tube on the outside of each probe and claims that the collocation criteria of Method 301 are infeasible for many currently accepted test methods including Method 30B. The commenter states that if the outside diameter of the validated test method probe is 3 inches (as is common for Method 30B probes), it is impossible for a second probe of equal diameter to meet the probe tip location requirement even if the two probes are immediately adjacent. In addition, the commenter claims that if the sample port being used to perform the validation testing has an inside diameter of 4 inches, a common port size, then two paired sampling probes with an outside diameter of 3 inches cannot physically fit into the sample port making collocation impossible. The commenter notes that sections 6.4.1 and 17.1 provide for some latitude for waivers of the probe placement requirements, but believes the waiver language is inadequate and recommends that EPA provide alternative probe placements that are practically achievable.

Response: We recommend that organizations conducting validation testing seek to use 6-inch ports, which are fairly common. Should 6-inch ports not be available at a source where validation testing must be conducted, then they should be installed if practicable. However, we recognize that there still may be instances where the sampling probes requirements are not feasible in a specific situation. Current Method 301 addresses this situation by providing in section 6.4.1 for Administrator approval of a validation request with other paired arrangements for the pitot tube. While we do not agree with the commenter that EPA should provide alternative probe tip and pitot tube placement options within Method 301, we do appreciate that the Administrator approval language provided in the method could confirm additional flexibility with regard to both pitot tube and probe tip placement and we have revised the language of section 6.4.1 and relocated it to section 6.4 to clarify that it is applicable to all aspects of sampling probe/pitot placement.

Comment: The commenter points out that section 8.0 of Method 301 specifies the bias of a candidate method as compared to a reference method be no more than 10 percent. The commenter contends this criterion is inadequate and unachievable at low concentrations, which are now more frequently occurring, and recommends that the Method 301 bias criterion be modified to include an alternative performance criterion based on an absolute difference rather than a percent of the measurement to address field validation measurements made at low levels.

Response: The EPA disagrees with the commenter that the Method 301 bias criterion should be modified to include an alternative performance criterion based on an absolute difference rather than a percent of the measurement. It is important to understand that the 10 percent bias criterion applies only to candidate methods that will be applied to multiple sources. A candidate method to be applied to a single source is allowed a bias up to 30 percent when coupled with a source-specific bias correction factor if the bias exceeds 10 percent. Though we recognize that emission levels are decreasing, when a candidate method is being validated for broad applicability to multiple sources, there is the opportunity to optimize field validation by conducting testing at sources with relatively higher emissions. As Method 301 is designed for validation of methods for many pollutants emitted from a large range of source categories under many different rules, EPA believes it would, at best, be extremely difficult to specify generic alternative criteria for validation at low levels. Such issues are part of the rationale for the flexibility under section 17.0 of Method 301; with this language EPA maintains the ability to waive some or all the procedures of Method 301 if it can be demonstrated to the Administrator's satisfaction that the bias and precision of a candidate method are suitable for the stated application. To clarify that these provisions apply to all required facets of Method 301, we have revised section 17.2 to include the LOD determination along with bias and precision.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this

action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA. The revisions in this action to Method 301 do not add information collection requirements, but make corrections and updates to existing testing methodology.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. The revisions to Method 301 do not impose any requirements on regulated entities beyond those specified in the current regulations and they do not change any emission standard. We have therefore concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. This action corrects and updates the existing procedures specified in Method 301. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

This action involves technical standards. The agency previously identified ASTM D4855–97 (Standard Practice for Comparing Test Methods) as being potentially applicable in previous revisions of Method 301, but determined that the use of ASTM D4855–97 was impractical (section V in 76 FR 28664, May 18, 2011).

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not establish an environmental health or safety standard. This action makes corrections and updates to an existing protocol for assessing the precision and accuracy of alternative test methods to ensure they are comparable to the methods otherwise required; thus, it does not modify or affect the impacts to human health or the environment of any standards for which it may be used.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Alternative test method, EPA Method 301, Field validation, Hazardous air pollutants.

Dated: March 8, 2018.

E. Scott Pruitt,

Administrator.

For the reasons stated in the preamble, the EPA amends title 40, chapter I of the Code of Federal Regulations as follows:

PART 63—[AMENDED]

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Appendix A to part 63 is amended by revising Method 301 to read as follows:

Appendix A to Part 63—Test Methods

Method 301—Field Validation of Pollutant Measurement Methods From Various Waste Media

Sec.

Using Method 301

1.0 What is the purpose of Method 301?

Method 301 provides a set of procedures for the owner or operator of an affected source to validate a candidate test method as an alternative to a required test method based on established precision and bias criteria.

These validation procedures are applicable under 40 CFR part 63 or 65 when a test method is proposed as an alternative test method to meet an applicable requirement or in the absence of a validated method. Additionally, the validation procedures of Method 301 are appropriate for demonstration of the suitability of alternative test methods under 40 CFR parts 59, 60, and 61. If, under 40 CFR part 63 or 60, you choose to propose a validation method other than Method 301, you must submit and obtain the Administrator's approval for the candidate validation method.

2.0 What approval must I have to use Method 301?

If you want to use a candidate test method to meet requirements in a subpart of 40 CFR part 59, 60, 61, 63, or 65, you must also request approval to use the candidate test method according to the procedures in Section 16 of this method and the appropriate section of the part (§ 59.104, § 59.406, § 60.8(b), § 61.13(h)(1)(ii), § 63.7(f), or § 65.158(a)(2)(iii)). You must receive the Administrator's written approval to use the candidate test method before you use the candidate test method to meet the applicable federal requirements. In some cases, the Administrator may decide to waive the requirement to use Method 301 for a candidate test method to be used to meet a requirement under 40 CFR part 59, 60, 61, 63, or 65 in absence of a validated test method. Section 17 of this method describes the requirements for obtaining a waiver.

3.0 What does Method 301 include?

3.1 *Procedures.* Method 301 includes minimum procedures to determine and document systematic error (bias) and random error (precision) of measured concentrations from exhaust gases, wastewater, sludge, and other media. Bias is established by comparing the results of sampling and analysis against a reference value. Bias may be adjusted on a source-specific basis using a correction factor and data obtained during the validation test. Precision may be determined using a paired sampling system or quadruplicate sampling system for isotopic spiking. A quadruplicate sampling system is required when establishing precision for analyte spiking or when comparing a candidate test method to a validated method. If such procedures have not been established and verified for the candidate test method, Method 301 contains procedures for ensuring sample stability by developing sample storage procedures and limitations and then testing them. Method 301 also includes procedures for ruggedness testing and determining detection limits. The procedures for ruggedness testing and determining detection limits are required for candidate test methods that are to be applied to multiple sources and optional for candidate test methods that are to be applied at a single source.

3.2 *Definitions.*

Affected source means an affected source as defined in the relevant part and subpart under Title 40 (*e.g.,* 40 CFR parts 59, 60, 61, 63, and 65).

Candidate test method means the sampling and analytical methodology selected for field validation using the procedures described in Method 301. The candidate test method may be an alternative test method under 40 CFR part 59, 60, 61, 63, or 65.

Paired sampling system means a sampling system capable of obtaining two replicate samples that are collected as closely as possible in sampling time and sampling location (collocated).

Quadruplicate sampling system means a sampling system capable of obtaining four replicate samples (*e.g.,* two pairs of measured data, one pair from each method when comparing a candidate test method against a validated test method, or analyte spiking with two spiked and two unspiked samples) that are collected as close as possible in sampling time and sampling location.

Surrogate compound means a compound that serves as a model for the target compound(s) being measured (*i.e.,* similar chemical structure, properties, behavior). The surrogate compound can be distinguished by the candidate test method from the compounds being analyzed.

4.0 How do I perform Method 301?

First, you use a known concentration of an analyte or compare the candidate test method against a validated test method to determine the bias of the candidate test method. Then, you collect multiple, collocated simultaneous samples to determine the precision of the candidate test method. Additional procedures, including validation testing over a broad range of concentrations over an extended time period are used to expand the applicability of a candidate test method to multiple sources. Sections 5.0 through 17.0 of this method describe the procedures in detail.

Reference Materials

5.0 What reference materials must I use?

You must use reference materials (a material or substance with one or more properties that are sufficiently homogenous to the analyte) that are traceable to a national standards body (*e.g.,* National Institute of Standards and Technology (NIST)) at the level of the applicable emission limitation or standard that the subpart in 40 CFR part 59, 60, 61, 63, or 65 requires. If you want to expand the applicable range of the candidate test method, you must conduct additional test runs using analyte concentrations higher and lower than the applicable emission limitation or the anticipated level of the target analyte. You must obtain information about your analyte according to the procedures in Sections 5.1 through 5.4 of this method.

5.1 *Exhaust Gas Test Concentration.* You must obtain a known concentration of each analyte from an independent source such as a specialty gas manufacturer, specialty chemical company, or chemical laboratory. You must also obtain the manufacturer's certification of traceability, uncertainty, and stability for the analyte concentration.

5.2 *Tests for Other Waste Media.* You must obtain the pure liquid components of each analyte from an independent manufacturer. The manufacturer must certify the purity, traceability, uncertainty, and shelf life of the pure liquid components. You must dilute the pure liquid components in the same type medium or matrix as the waste from the affected source.

5.3 *Surrogate Analytes.* If you demonstrate to the Administrator's satisfaction that a surrogate compound behaves as the analyte does, then you may use surrogate compounds for highly toxic or reactive compounds. A surrogate may be an isotope or compound that contains a unique element (*e.g.,* chlorine) that is not present in the source or a derivation of the toxic or reactive compound if the derivative formation is part of the method's procedure. You may use laboratory experiments or literature data to show behavioral acceptability.

5.4 *Isotopically-Labeled Materials.* Isotope mixtures may contain the isotope and the natural analyte. The concentration of the isotopically-labeled analyte must be more than five times the concentration of the naturally-occurring analyte.

Sampling Procedures

6.0 What sampling procedures must I use?

You must determine bias and precision by comparison against a validated test method using isotopic spiking or using analyte spiking (or the equivalent). Isotopic spiking can only be

used with candidate test methods capable of measuring multiple isotopes simultaneously such as test methods using mass spectrometry or radiological procedures. You must collect samples according to the requirements specified in Table 301–1 of this method. You must perform the sampling according to the procedures in Sections 6.1 through 6.4 of this method.

6.1 *Isotopic Spiking.* Spike all 12 samples with isotopically-labelled analyte at an analyte mass or concentration level equivalent to the emission limitation or standard specified in the applicable regulation. If there is no applicable emission limitation or standard, spike the analyte at the expected level of the samples. Follow the applicable spiking procedures in Section 6.3 of this method.

6.2 *Analyte Spiking.* In each quadruplicate set, spike half of the samples (two out of the four samples) with the analyte according to the applicable procedure in Section 6.3 of this method. You should spike at an analyte mass or concentration level equivalent to the emission limitation or standard specified in the applicable regulation. If there is no applicable emission limitation or standard, spike the analyte at the expected level of the samples. Follow the applicable spiking procedures in Section 6.3 of this method.

6.3 *Spiking Procedure.*

6.3.1 *Gaseous Analyte with Sorbent or Impinger Sampling Train.* Sample the analyte being spiked (in the laboratory or preferably in the field) at a mass or concentration that is approximately equivalent to the applicable emission limitation or standard (or the expected sample concentration or mass where there is no standard) for the time required by the candidate test method, and then sample the stack gas stream for an equal amount of time. The time for sampling both the analyte and stack gas stream should be equal; however, you must adjust the sampling time to avoid sorbent breakthrough. You may sample the stack gas and the gaseous analyte at the same time. You must introduce the analyte as close to the tip of the sampling probe as possible.

6.3.2 *Gaseous Analyte with Sample Container (Bag or Canister).* Spike the sample containers after completion of each test run with an analyte mass or concentration to yield a concentration approximately equivalent to the applicable emission limitation or standard (or the expected sample concentration or mass where there is no standard). Thus, the final concentration of the analyte in the sample container would be approximately equal to the analyte concentration in the stack gas plus the equivalent of the applicable emission standard (corrected for spike volume). The volume amount of spiked gas must be less than 10 percent of the sample volume of the container.

6.3.3 *Liquid or Solid Analyte with Sorbent or Impinger Trains.* Spike the sampling trains with an amount approximately equivalent to the mass or concentration in the applicable emission limitation or standard (or the expected sample concentration or mass where there is no standard) before sampling the stack gas. If possible, do the spiking in the field. If it is not possible to do the spiking in the field, you must spike the sampling trains in the laboratory.

6.3.4 *Liquid and Solid Analyte with Sample Container (Bag or Canister).* Spike the containers at the completion of each test run with an analyte mass or concentration approximately equivalent to the applicable emission limitation or standard in the subpart (or the expected sample concentration or mass where there is no standard).

6.4 *Probe Placement and Arrangement for Stationary Source Stack or Duct Sampling.* To sample a stationary source, you must place the paired or quadruplicate probes according to the procedures in this subsection. You must place the probe tips in the same horizontal plane. Section 17.1 of Method 301 describes conditions for waivers. For example, the Administrator may approve a validation request where other paired arrangements for the probe tips or pitot tubes (where required) are used.

6.4.1 *Paired Sampling Probes.* For paired sampling probes, the first probe tip should be 2.5 centimeters (cm) from the outside edge of the second probe tip, with a pitot tube on the outside of each probe.

6.4.2 *Quadruplicate Sampling Probes.* For quadruplicate sampling probes, the tips should be in a 6.0 cm × 6.0 cm square area measured from the center line of the opening of the probe tip with a single pitot tube, where required, in the center of the probe tips or two pitot tubes, where required, with their location on either side of the probe tip configuration. Section 17.1 of Method 301 describes conditions for waivers. For example, you must propose an alternative arrangement whenever the cross-sectional area of the probe tip configuration is approximately five percent or more of the stack or duct cross-sectional area.

7.0 How do I ensure sample stability?

7.1 *Developing Sample Storage and Threshold Procedures.* If the candidate test method includes well-established procedures supported by experimental data for sample storage and the time within which the collected samples must be analyzed, you must store the samples according to the procedures in the candidate test method and you are not required to conduct the procedures specified in Section 7.2 or 7.3 of this method. If the candidate test method does not include such procedures, your candidate method must include procedures for storing and analyzing samples to ensure sample stability. At a minimum, your proposed procedures must meet the requirements in Section 7.2 or 7.3 of this method. The minimum duration between sample collection and storage must be as soon as possible, but no longer than 72 hours after collection of the sample. The maximum storage duration must not be longer than 2 weeks.

7.2 *Storage and Sampling Procedures for Stack Test Emissions.* You must store and analyze samples of stack test emissions according to Table 301–2 of this method. You may reanalyze the same sample at both the minimum and maximum storage durations for: (1) Samples collected in containers such as bags or canisters that are not subject to dilution or other preparation steps, or (2) impinger samples not subjected to preparation steps that would affect stability of the sample such as extraction or digestion. For candidate test method samples that do not meet either of these criteria, you must analyze one of a pair of replicate samples at the minimum storage duration and the other replicate at the proposed storage duration but no later than 2 weeks of the initial analysis to identify the effect of storage duration on analyte samples. If you are using the isotopic spiking procedure, then you must analyze each sample for the spiked analyte and the native analyte.

7.3 *Storage and Sampling Procedures for Testing Other Waste Media (e.g., Soil/Sediment, Solid Waste, Water/Liquid).* You must analyze one of each pair of replicate samples (half the total samples) at the minimum storage duration and the other replicate (other half of samples) at the maximum storage duration or within 2 weeks of the initial analysis to identify the effect of storage duration on analyte samples. The minimum time period between collection and storage should be as soon as possible, but no longer than 72 hours after collection of the sample.

7.4 *Sample Stability.* After you have conducted sampling and analysis

according to Section 7.2 or 7.3 of this method, compare the results at the minimum and maximum storage durations. Calculate the difference in the results using Equation 301–1.

$$d_i = R_{mini} - R_{maxi} \quad \text{(Eq. 301-1)}$$

Where:

d_i = Difference between the results of the i^{th} replicate pair of samples.
R_{mini} = Results from the i^{th} replicate sample pair at the minimum storage duration.
R_{maxi} = Results from the i^{th} replicate sample pair at the maximum storage duration.

For single samples that can be reanalyzed for sample stability assessment (*e.g.,* bag or canister samples and impinger samples that do not require digestion or extraction), the values for R_{mini} and R_{maxi} will be obtained from the same sample rather than replicate samples.

7.4.1 *Standard Deviation.* Determine the standard deviation of the paired samples using Equation 301–2.

$$SD_d = \sqrt{\frac{\sum_i^n (d_i - d_m)^2}{n-1}} \quad \text{(Eq. 301-2)}$$

Where:

SD_d = Standard deviation of the differences of the paired samples.
d_i = Difference between the results of the i^{th} replicate pair of samples.
d_m = Mean of the paired sample differences.
n = Total number of paired samples.

7.4.2 *T Test.* Test the difference in the results for statistical significance by calculating the t-statistic and determining if the mean of the differences between the results at the minimum storage duration and the results after the maximum storage duration is significant at the 95 percent confidence level and n–1 degrees of freedom. Calculate the value of the t-statistic using Equation 301–3.

$$t = \frac{|d_m|}{\left(\frac{SD_d}{\sqrt{n}}\right)} \quad \text{(Eq. 301-3)}$$

Where:

t = t-statistic.
d_m = The mean of the paired sample differences.
SD_d = Standard deviation of the differences of the paired samples.
n = Total number of paired samples.

Compare the calculated t-statistic with the critical value of the t-statistic from Table 301–3 of this method. If the calculated t-value is less than the critical value, the difference is not statistically significant. Therefore, the sampling, analysis, and sample storage procedures ensure stability, and you may submit a request for validation of the candidate test method. If the calculated t-value is greater than the critical value, the difference is statistically significant, and you must repeat the procedures in Section 7.2 or 7.3 of this method with new samples using a shorter proposed maximum storage duration or improved handling and storage procedures.

Determination of Bias and Precision

8.0 What are the requirements for bias?

You must determine bias by comparing the results of sampling and analysis using the candidate test method against a reference value. The bias must be no more than ±10 percent for the candidate test method to be considered for application to multiple sources. A candidate test method with a bias greater than ±10 percent and less than or equal to ±30 percent can only be applied on a source-specific basis at the facility at which the validation testing was conducted. In this case, you must use a correction factor for all data collected in the future using the candidate test method. If the bias is more than ±30 percent, the candidate test method is unacceptable.

9.0 What are the requirements for precision?

You may use a paired sampling system or a quadruplicate sampling system to establish precision for isotopic spiking. You must use a quadruplicate sampling system to establish precision for analyte spiking or when comparing a candidate test method to a validated method. If you are using analyte spiking or isotopic spiking, the precision, expressed as the relative standard deviation (RSD) of the candidate test method, must be less than or equal to 20 percent. If you are comparing the candidate test method to a validated test method, the candidate test method must be at least as precise as the validated method as determined by an F test (see Section 11.2.2 of this method).

10.0 What calculations must I perform for isotopic spiking?

You must analyze the bias, RSD, precision, and data acceptance for isotopic spiking tests according to the provisions in Sections 10.1 through 10.4 of this method.

10.1 *Numerical Bias.* Calculate the numerical value of the bias using the results from the analysis of the isotopic spike in the field samples and the calculated value of the spike according to Equation 301–4.

$$B = S_m - CS \quad \text{(Eq. 301-4)}$$

Where:

B = Bias at the spike level.

S_m = Mean of the measured values of the isotopically-labeled analyte in the samples.

CS = Calculated value of the isotopically-labeled spike level.

10.2 *Standard Deviation.* Calculate the standard deviation of the S_i values according to Equation 301–5.

$$SD = \sqrt{\frac{\sum_{i}^{n} (S_i - S_m)^2}{(n-1)}} \quad \text{(Eq. 301-5)}$$

Where:

SD = Standard deviation of the candidate test method.

S_i = Measured value of the isotopically-labeled analyte in the i^{th} field sample.

S_m = Mean of the measured values of the isotopically-labeled analyte in the samples.

n = Number of isotopically-spiked samples.

10.3 *T Test.* Test the bias for statistical significance by calculating the t-statistic using Equation 301–6. Use the standard deviation determined in Section 10.2 of this method and the numerical bias determined in Section 10.1 of this method.

$$t = \frac{|B|}{\left(\frac{SD}{\sqrt{n}}\right)} \quad \text{(Eq. 301-6)}$$

Where:

t = Calculated t-statistic.

B = Bias at the spike level.

SD = Standard deviation of the candidate test method.

n = Number of isotopically spike samples.

Compare the calculated t-value with the critical value of the two-sided t-distribution at the 95 percent confidence level and n–1 degrees of freedom (see Table 301–3 of this method). When you conduct isotopic spiking according to the procedures specified in Sections 6.1 and 6.3 of this method as required, this critical value is 2.201 for 11 degrees of freedom. If the calculated t-value is less than or equal to the critical value, the bias is not statistically significant, and the bias of the candidate test method is acceptable. If the calculated t-value is greater than the critical value, the bias is statistically significant, and you must evaluate the relative magnitude of the bias using Equation 301–7.

$$B_R = \left|\frac{B}{CS}\right| x100\% \quad \text{(Eq. 301-7)}$$

Where:

B_R = Relative bias.

B = Bias at the spike level.

CS = Calculated value of the spike level.

If the relative bias is less than or equal to 10 percent, the bias of the candidate test method is acceptable for use at multiple sources. If the relative bias is greater than 10 percent but less than or equal to 30 percent, and if you correct all data collected with the candidate test method in the future for bias using the source-specific correction factor determined in Equation 301–8, the candidate test method is acceptable only for application to the source at which the validation testing was conducted and may not be applied to any other sites. If either of the preceding two cases applies, you may continue to evaluate the candidate test method by calculating its precision. If not, the candidate test method does not meet the requirements of Method 301.

$$CF = \left(\frac{1}{1 + \frac{B}{CS}}\right) \quad \text{(Eq. 301-8)}$$

Where:

CF = Source-specific bias correction factor.

B = Bias at the spike level.

CS = Calculated value of the spike level.

If the CF is outside the range of 0.70 to 1.30, the data and method are considered unacceptable.

10.4 *Precision.* Calculate the RSD according to Equation 301–9.

$$RSD = \left(\frac{SD}{S_m}\right) x\ 100 \qquad \text{(Eq. 301-9)}$$

Where:

RSD = Relative standard deviation of the candidate test method.

SD = Standard deviation of the candidate test method calculated in Equation 301–5.

S_m = Mean of the measured values of the spike samples.

The data and candidate test method are unacceptable if the RSD is greater than 20 percent.

11.0 What calculations must I perform for comparison with a validated method?

If you are comparing a candidate test method to a validated method, then you must analyze the data according to the provisions in this section. If the data from the candidate test method fail either the bias or precision test, the data and the candidate test method are unacceptable. If the Administrator determines that the affected source has highly variable emission rates, the Administrator may require additional precision checks.

11.1 *Bias Analysis.* Test the bias for statistical significance at the 95 percent confidence level by calculating the t-statistic.

11.1.1 *Bias.* Determine the bias, which is defined as the mean of the differences between the candidate test method and the validated method (d_m). Calculate d_i according to Equation 301–10.

$$d_i = \frac{(V_{1i} + V_{2i})}{2} - \frac{(P_{1i} + P_{2i})}{2} \qquad \text{(Eq. 301-10)}$$

Where:

d_i = Difference in measured value between the candidate test method and the validated method for each quadruplicate sampling train.

V_{1i} = First measured value with the validated method in the ith quadruplicate sampling train.

V_{2i} = Second measured value with the validated method in the ith quadruplicate sampling train.

P_{1i} = First measured value with the candidate test method in the ith quadruplicate sampling train.

P_{2i} = Second measured value with the candidate test method in the ith quadruplicate sampling train.

Calculate the numerical value of the bias using Equation 301–11.

$$B = \frac{\sum_{i}^{n} d_i}{n} \qquad \text{(Eq. 301-11)}$$

Where:

B = Numerical bias.

d_i = Difference between the candidate test method and the validated method for the ith quadruplicate sampling train.

n = Number of quadruplicate sampling trains.

11.1.2 *Standard Deviation of the Differences.* Calculate the standard deviation of the differences, SD_d, using Equation 301–12.

$$SD_d = \sqrt{\frac{\sum_{i}^{n} (d_i - d_m)^2}{(n-1)}} \qquad \text{(Eq. 301-12)}$$

Where:

SD_d = Standard deviation of the differences between the candidate test method and the validated method.

d_i = Difference in measured value between the candidate test method and the validated method for each quadruplicate sampling train.

d_m = Mean of the differences, d_i, between the candidate test method and the validated method.

n = Number of quadruplicate sampling trains.

11.1.3 *T Test.* Calculate the t-statistic using Equation 301–13.

$$t = \frac{|d_m|}{\left(\frac{SD}{\sqrt{n}}\right)} \qquad \text{(Eq. 301-13)}$$

Where:

t = Calculated t-statistic.

d_m = The mean of the differences, d_i, between the candidate test method and the validated method.

SD_d = Standard deviation of the differences between the candidate test method and the validated method.

n = Number of quadruplicate sampling trains.

For the procedure comparing a candidate test method to a validated test method listed in Table 301–1 of this method, n equals six. Compare the calculated t-statistic with the critical value of the t-statistic, and determine if the bias is significant at the 95 percent confidence level (see Table 301–3 of this method). When six runs are conducted, as specified in Table 301–1 of this method, the critical value of the t-statistic is 2.571 for five degrees of freedom. If the calculated t-value is less than or equal to the critical value, the bias is not statistically significant and the data are acceptable. If the calculated t-value is greater than the critical value, the bias is statistically significant, and you must evaluate the magnitude of the relative bias using Equation 301–14.

$$B_R = \left|\frac{B}{VS}\right| x\ 100\% \qquad \text{(Eq. 301-14)}$$

Where:

B_R = Relative bias.
B = Bias as calculated in Equation 301–11.
VS = Mean of measured values from the validated method.

If the relative bias is less than or equal to 10 percent, the bias of the candidate test method is acceptable. On a source-specific basis, if the relative bias is greater than 10 percent but less than or equal to 30 percent, and if you correct all data collected in the future with the candidate test method for the bias using the correction factor, CF, determined in Equation 301–8 (using VS for CS), the bias of the candidate test method is acceptable for application to the source at which the validation testing was conducted. If either of the preceding two cases applies, you may continue to evaluate the candidate test method by calculating its precision. If not, the candidate test method does not meet the requirements of Method 301.

11.2 *Precision.* Compare the estimated variance (or standard deviation) of the candidate test method to that of the validated test method according to Sections 11.2.1 and 11.2.2 of this method. If a significant difference is determined using the F test, the candidate test method and the results are rejected. If the F test does not show a significant difference, then the candidate test method has acceptable precision.

11.2.1 *Candidate Test Method Variance.* Calculate the estimated variance of the candidate test method according to Equation 301–15.

$$S_p^2 = \frac{\sum_i^n d_i^2}{2n} \qquad \text{(Eq. 301-15)}$$

Where:

S_p^2 = Estimated variance of the candidate test method.
d_i = The difference between the i^{th} pair of samples collected with the candidate test method in a single quadruplicate train.
n = Total number of paired samples (quadruplicate trains).

Calculate the estimated variance of the validated test method according to Equation 301–16.

$$S_v^2 = \frac{\sum_i^n d_i^2}{2n} \qquad \text{(Eq. 301-16)}$$

Where:

S_v^2 = Estimated variance of the validated test method.
d_i = The difference between the i^{th} pair of samples collected with the validated test method in a single quadruplicate train.
n = Total number of paired samples (quadruplicate trains).

11.2.2 *The F test.* Determine if the estimated variance of the candidate test method is greater than that of the validated method by calculating the F-value using Equation 301–17.

$$F = \frac{S_p^2}{S_v^2} \qquad \text{(Eq. 301-17)}$$

Where:

F = Calculated F value.
S_p^2 = The estimated variance of the candidate test method.
S_v^2 = The estimated variance of the validated method.

Compare the calculated F value with the one-sided confidence level for F from Table 301–4 of this method. The upper one-sided confidence level of 95 percent for $F_{(6,6)}$ is 4.28 when the procedure specified in Table 301–1 of this method for quadruplicate sampling trains is followed. If the calculated F value is greater than the critical F value, the difference in precision is significant, and the data and the candidate test method are unacceptable.

12.0 What calculations must I perform for analyte spiking?

You must analyze the data for analyte spike testing according to this section.

12.1 *Bias Analysis.* Test the bias for statistical significance at the 95 percent confidence level by calculating the t-statistic.

12.1.1 *Bias.* Determine the bias, which is defined as the mean of the differences between the spiked samples and the unspiked samples in each quadruplicate sampling train minus the spiked amount, using Equation 301–18.

$$d_i = \frac{(S_{1i} + S_{2i})}{2} - \frac{(M_{1i} + M_{2i})}{2} - CS \quad \text{(Eq. 301-18)}$$

Where:

d_i = Difference between the spiked samples and unspiked samples in each quadruplicate sampling train minus the spiked amount.

S_{1i} = Measured value of the first spiked sample in the i^{th} quadruplicate sampling train.

S_{2i} = Measured value of the second spiked sample in the i^{th} quadruplicate sampling train.

M_{1i} = Measured value of the first unspiked sample in the i^{th} quadruplicate sampling train.

M_{2i} = Measured value of the second unspiked sample in the i^{th} quadruplicate sampling train.

CS = Calculated value of the spike level.

Calculate the numerical value of the bias using Equation 301–19.

$$B = \frac{\sum_{i}^{n} d_i}{n} \quad \text{(Eq. 301-19)}$$

Where:

B = Numerical value of the bias.

d_i = Difference between the spiked samples and unspiked samples in each quadruplicate sampling train minus the spiked amount.

n = Number of quadruplicate sampling trains.

12.1.2 *Standard Deviation of the Differences.* Calculate the standard deviation of the differences using Equation 301–20.

$$SD_d = \sqrt{\frac{\sum_{i}^{n}(d_i - d_m)^2}{n-1}} \quad \text{(Eq. 301-20)}$$

Where:

SD_d = Standard deviation of the differences of paired samples.

d_i = Difference between the spiked samples and unspiked samples in each quadruplicate sampling train minus the spiked amount.

d_m = The mean of the differences, d_i, between the spiked samples and unspiked samples.

n = Total number of quadruplicate sampling trains.

12.1.3 *T Test.* Calculate the t-statistic using Equation 301–21, where n is the total number of test sample differences (d_i). For the quadruplicate sampling system procedure in Table 301–1 of this method, n equals six.

$$t = \frac{|d_m|}{\left(\frac{SD_d}{\sqrt{n}}\right)} \quad \text{(Eq. 301-21)}$$

Where:

t = Calculated t-statistic.

d_m = Mean of the difference, d_i, between the spiked samples and unspiked samples.

SD_d = Standard deviation of the differences of paired samples.

n = Number of quadruplicate sampling trains.

Compare the calculated t-statistic with the critical value of the t-statistic, and determine if the bias is significant at the 95 percent confidence level. When six quadruplicate runs are conducted, as specified in Table 301–1 of this method, the 2-sided confidence level critical value is 2.571 for the five degrees of freedom. If the calculated t-value is less than the critical value, the bias is not statistically significant and the data are acceptable. If the calculated t-value is greater than the critical value, the bias is statistically significant and you must evaluate the magnitude of the relative bias using Equation 301–22.

$$B_R = \left|\frac{B}{CS}\right| x\,100\% \quad \text{(Eq. 301-22)}$$

Where:

B_R = Relative bias.

B = Bias at the spike level from Equation 301–19.

CS = Calculated value at the spike level.

If the relative bias is less than or equal to 10 percent, the bias of the candidate test method is acceptable. On a source-

specific basis, if the relative bias is greater than 10 percent but less than or equal to 30 percent, and if you correct all data collected with the candidate test method in the future for the magnitude of the bias using Equation 301–8, the bias of the candidate test method is acceptable for application to the tested source at which the validation testing was conducted. Proceed to evaluate precision of the candidate test method.

12.2 *Precision.* Calculate the standard deviation using Equation 301–23.

$$SD = \sqrt{\frac{\sum_{i}^{n} (S_i - S_m)^2}{(n-1)}} \quad \text{(Eq. 301-23)}$$

Where:

SD = Standard deviation of the candidate test method.

S_i = Measured value of the analyte in the i^{th} spiked sample.

S_m = Mean of the measured values of the analyte in all the spiked samples.

n = Number of spiked samples.

Calculate the RSD of the candidate test method using Equation 301–9, where SD and S_m are the values from Equation 301–23. The data and candidate test method are unacceptable if the RSD is greater than 20 percent.

13.0 How do I conduct tests at similar sources?

If the Administrator has approved the use of an alternative test method to a test method required in 40 CFR part 59, 60, 61, 63, or 65 for an affected source, and you would like to apply the alternative test method to a similar source, then you must petition the Administrator as described in Section 17.1.1 of this method.

Optional Requirements

14.0 How do I use and conduct ruggedness testing?

Ruggedness testing is an optional requirement for validation of a candidate test method that is intended for the source where the validation testing was conducted. Ruggedness testing is required for validation of a candidate test method intended to be used at multiple sources. If you want to use a validated test method at a concentration that is different from the concentration in the applicable emission limitation under 40 CFR part 59, 60, 61, 63, or 65, or for a source category that is different from the source category that the test method specifies, then you must conduct ruggedness testing according to the procedures in Reference 18.16 of Section 18.0 of this method and submit a request for a waiver for conducting Method 301 at that different source category according to Section 17.1.1 of this method.

Ruggedness testing is a study that can be conducted in the laboratory or the field to determine the sensitivity of a method to parameters such as analyte concentration, sample collection rate, interferent concentration, collection medium temperature, and sample recovery temperature. You conduct ruggedness testing by changing several variables simultaneously instead of changing one variable at a time. For example, you can determine the effect of seven variables in only eight experiments. (W.J. Youden, Statistical Manual of the Association of Official Analytical Chemists, Association of Official Analytical Chemists, Washington, DC, 1975, pp. 33–36).

15.0 How do I determine the Limit of Detection for the candidate test method?

Determination of the Limit of Detection (LOD) as specified in Sections 15.1 and 15.2 of this method is required for source-specific method validation and validation of a candidate test method intended to be used for multiple sources.

15.1 *Limit of Detection.* The LOD is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. For this protocol, the LOD is defined as three times the standard deviation, S_o, at the blank level.

15.2 *Purpose.* The LOD establishes the lower detection limit of the candidate test method. You must calculate the LOD using the applicable procedures found in Table 301–5 of this method. For candidate test methods that collect the analyte in a sample matrix prior to an analytical measurement, you must determine the LOD using Procedure I in Table 301–5 of this method by calculating a method detection limit (MDL) as described in 40 CFR part 136, appendix B. For the purposes of this section, the LOD is equivalent to the calculated MDL. For radiochemical methods, use the Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP) Manual (*i.e.,* use the minimum detectable concentration (MDC) and not the LOD) available at *https://www.epa.gov/radiation/marlap-manual-and-supporting-documents.*

Other Requirements and Information

16.0 How do I apply for approval to use a candidate test method?

16.1 *Submitting Requests.* You must request to use a candidate test method according to the procedures in § 63.7(f) or similar sections of 40 CFR parts 59, 60, 61, and 65 (§ 59.104, § 59.406, § 60.8(b), § 61.13(h)(1)(ii), or § 65.158(a)(2)(iii)). You cannot use a candidate test method to meet any requirement under these parts until the Administrator has approved your request. The request must include a field validation report containing the information in Section 16.2 of this method. You must submit the request to the Group Leader, Measurement Technology Group, U.S. Environmental Protection Agency, E143–02, Research Triangle Park, NC 27711.

16.2 *Field Validation Report.* The field validation report must contain the information in Sections 16.2.1 through 16.2.8 of this method.

16.2.1 *Regulatory objectives for the testing, including a description of the reasons for the test, applicable emission limits, and a description of the source.*

16.2.2 *Summary of the results and calculations shown in Sections 6.0 through 16.0 of this method, as applicable.*

16.2.3 *Reference material certification and value(s).*

16.2.4 *Discussion of laboratory evaluations.*

16.2.5 *Discussion of field sampling.*

16.2.6 *Discussion of sample preparation and analysis.*

16.2.7 *Storage times of samples (and extracts, if applicable).*

16.2.8 *Reasons for eliminating any results.*

17.0 How do I request a waiver?

17.1 *Conditions for Waivers.* If you meet one of the criteria in Section 17.1.1 or 17.1.2 of this method, the Administrator may waive the requirement to use the procedures in this method to validate an alternative or

other candidate test method. In addition, if the EPA currently recognizes an appropriate test method or considers the candidate test method to be satisfactory for a particular source, the Administrator may waive the use of this protocol or may specify a less rigorous validation procedure.

17.1.1 *Similar Sources.* If the alternative or other candidate test method that you want to use was validated for source-specific application at another source and you can demonstrate to the Administrator's satisfaction that your affected source is similar to that validated source, then the Administrator may waive the requirement for you to validate the alternative or other candidate test method. One procedure you may use to demonstrate the applicability of the method to your affected source is to conduct a ruggedness test as described in Section 14.0 of this method.

17.1.2 *Documented Methods.* If the bias, precision, LOD, or ruggedness of the alternative or other candidate test method that you are proposing have been demonstrated through laboratory tests or protocols different from this method, and you can demonstrate to the Administrator's satisfaction that the bias, precision, LOD, or ruggedness apply to your application, then the Administrator may waive the requirement to use this method or to use part of this method.

17.2 *Submitting Applications for Waivers.* You must sign and submit each request for a waiver from the requirements in this method in writing. The request must be submitted to the Group Leader, Measurement Technology Group, U.S. Environmental Protection Agency, E143–02, Research Triangle Park, NC 27711.

17.3 *Information Application for Waiver.* The request for a waiver must contain a thorough description of the candidate test method, the intended application, and results of any validation or other supporting documents. The request for a waiver must contain, at a minimum, the information in Sections 17.3.1 through 17.3.4 of this method. The Administrator may request additional information if necessary to determine whether this method can be waived for a particular application.

17.3.1 *A Clearly Written Test Method.* The candidate test method should be written preferably in the format of 40 CFR part 60, appendix A, Test Methods. Additionally, the candidate test must include an applicability statement, concentration range, precision, bias (accuracy), and minimum and maximum storage durations in which samples must be analyzed.

17.3.2 *Summaries of Previous Validation Tests or Other Supporting Documents.* If you use a different procedure from that described in this method, you must submit documents substantiating the bias and precision values to the Administrator's satisfaction.

17.3.3 *Ruggedness Testing Results.* You must submit results of ruggedness testing conducted according to Section 14.0 of this method, sample stability conducted according to Section 7.0 of this method, and detection limits conducted according to Section 15.0 of this method, as applicable. For example, you would not need to submit ruggedness testing results if you will be using the method at the same affected source and level at which it was validated.

17.3.4 *Applicability Statement and Basis for Waiver Approval.* Discussion of the applicability statement and basis for approval of the waiver. This discussion should address as applicable the following: applicable regulation, emission standards, effluent characteristics, and process operations.

18.0 Where can I find additional information?

You can find additional information in the references in Sections 18.1 through 18.18 of this method.

18.1 Albritton, J.R., G.B. Howe, S.B. Tompkins, R.K.M. Jayanty, and C.E. Decker. 1989. Stability of Parts-Per-Million Organic Cylinder Gases and Results of Source Test Analysis Audits, Status Report No. 11. Environmental Protection Agency Contract 68–02–4125. Research Triangle Institute, Research Triangle Park, NC. September.

18.2 ASTM Standard E 1169–89 (current version), ''Standard Guide for Conducting Ruggedness Tests,'' available from ASTM, 100 Barr Harbor Drive, West Conshohoken, PA 19428.

18.3 DeWees, W.G., P.M. Grohse, K.K. Luk, and F.E. Butler. 1989. Laboratory and Field Evaluation of a Methodology for Speciating Nickel Emissions from Stationary Sources. EPA Contract 68–02–4442. Prepared for Atmospheric Research and Environmental Assessment Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. January.

18.4 International Conference on Harmonization of Technical Requirements for the Registration of Pharmaceuticals for Human Use, ICH–Q2A, ''Text on Validation of Analytical Procedures,'' 60 FR 11260 (March 1995).

18.5 International Conference on Harmonization of Technical Requirements for the Registration of Pharmaceuticals for Human Use, ICH–Q2b, ''Validation of Analytical Procedures: Methodology,'' 62 FR 27464 (May 1997).

18.6 Keith, L.H., W. Crummer, J. Deegan Jr., R.A. Libby, J.K. Taylor, and G. Wentler. 1983. Principles of Environmental Analysis. American Chemical Society, Washington, DC.

18.7 Maxwell, E.A. 1974. Estimating variances from one or two measurements on each sample. Amer. Statistician 28:96–97.

18.8 Midgett, M.R. 1977. How EPA Validates NSPS Methodology. Environ. Sci. & Technol. 11(7):655–659.

18.9 Mitchell, W.J., and M.R. Midgett. 1976. Means to evaluate performance of stationary source test methods. Environ. Sci. & Technol. 10:85–88.

18.10 Plackett, R.L., and J.P. Burman. 1946. The design of optimum multifactorial experiments. Biometrika, 33:305.

18.11 Taylor, J.K. 1987. Quality Assurance of Chemical Measurements. Lewis Publishers, Inc., pp. 79–81.

18.12 U.S. Environmental Protection Agency. 1978. Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III. Stationary Source Specific Methods. Publication No. EPA–600/4–77–027b. Office of Research and Development Publications, 26 West St. Clair St., Cincinnati, OH 45268.

18.13 U.S. Environmental Protection Agency. 1981. A Procedure for Establishing Traceability of Gas Mixtures to Certain National Bureau of Standards Standard Reference Materials. Publication No. EPA–600/7–81–010. Available from the U.S. EPA, Quality Assurance Division (MD–77), Research Triangle Park, NC 27711.

18.14 U.S. Environmental Protection Agency. 1991. Protocol for The Field Validation of Emission Concentrations from Stationary Sources. Publication No. 450/4–90–015. Available from the U.S. EPA, Emission Measurement Technical Information Center, Technical Support Division (MD–14), Research Triangle Park, NC 27711.

18.15 Wernimont, G.T., ''Use of Statistics to Develop and Evaluate Analytical Methods,'' AOAC, 1111 North 19th Street, Suite 210, Arlington, VA 22209, USA, 78–82 (1987).

18.16 Youden, W.J. Statistical techniques for collaborative tests. In: Statistical Manual of the Association of Official Analytical Chemists, Association of Official Analytical Chemists, Washington, DC, 1975, pp. 33–36.

18.17 NIST/SEMATECH (current version), ''e-Handbook of Statistical Methods,'' available from NIST, *http://www.itl.nist.gov/div898/handbook/.*

18.18 Statistical Table, *http://www.math.usask.ca/~szafron/Stats244/f_table_0_05.pdf.*

19.0 Tables.

TABLE 301–1—SAMPLING PROCEDURES

If you are . . .	You must collect . . .
Comparing the candidate test method against a validated method	A total of 24 samples using a quadruplicate sampling system (a total of six sets of replicate samples). In each quadruplicate sample set, you must use the validated test method to collect and analyze half of the samples.
Using isotopic spiking (can only be used with methods capable of measurement of multiple isotopes simultaneously).	A total of 12 samples, all of which are spiked with isotopically-labeled analyte. You may collect the samples either by obtaining six sets of paired samples or three sets of quadruplicate samples.
Using analyte spiking	A total of 24 samples using the quadruplicate sampling system (a total of six sets of replicate samples—two spiked and two unspiked).

TABLE 301–2—STORAGE AND SAMPLING PROCEDURES FOR STACK TEST EMISSIONS

If you are . . .	With . . .	Then you must . . .
Using isotopic or analyte spiking procedures.	Sample container (bag or canister) or impinger sampling systems that are not subject to dilution or other preparation steps.	Analyze six of the samples within 7 days and then analyze the same six samples at the proposed maximum storage duration or 2 weeks after the initial analysis.
	Sorbent and impinger sampling systems that require extraction or digestion.	Extract or digest six of the samples within 7 days and extract or digest six other samples at the proposed maximum storage duration or 2 weeks after the first extraction or digestion. Analyze an aliquot of the first six extracts (digestates) within 7 days and proposed maximum storage duration or 2 weeks after the initial analysis. This will allow analysis of extract storage impacts.
	Sorbent sampling systems that require thermal desorption.	Analyze six samples within 7 days. Analyze another set of six samples at the proposed maximum storage time or within 2 weeks of the initial analysis.
Comparing a candidate test method against a validated test method.	Sample container (bag or canister) or impinger sampling systems that are not subject to dilution or other preparation steps.	Analyze at least six of the candidate test method samples within 7 days and then analyze the same six samples at the proposed maximum storage duration or within 2 weeks of the initial analysis.
	Sorbent and impinger sampling systems that require extraction or digestion.	Extract or digest six of the candidate test method samples within 7 days and extract or digest six other samples at the proposed maximum storage duration or within 2 weeks of the first extraction or digestion. Analyze an aliquot of the first six extracts (digestates) within 7 days and an aliquot at the proposed maximum storage durations or within 2 weeks of the initial analysis. This will allow analysis of extract storage impacts.
	Sorbent systems that require thermal desorption.	Analyze six samples within 7 days. Analyze another set of six samples at the proposed maximum storage duration or within 2 weeks of the initial analysis.

TABLE 301–3—CRITICAL VALUES OF t FOR THE TWO-TAILED 95 PERCENT CONFIDENCE LIMIT [1]

Degrees of freedom	t_{95}
1	12.706
2	4.303
3	3.182
4	2.776
5	2.571
6	2.447
7	2.365
8	2.306
9	2.262
10	2.228
11	2.201
12	2.179
13	2.160
14	2.145
15	2.131
16	2.120
17	2.110
18	2.101
19	2.093
20	2.086

[1] Adapted from Reference 18.17 in section 18.0.

TABLE 301–4—UPPER CRITICAL VALUES OF THE F DISTRIBUTION FOR THE 95 PERCENT CONFIDENCE LIMIT [1]

Numerator (k_1) and denominator (k_2) degrees of freedom	$F\{F>F_{.05}(k_1,k_2)\}$
1,1	161.40
2,2	19.00
3,3	9.28
4,4	6.39
5,5	5.05
6,6	4.28
7,7	3.79
8,8	3.44
9,9	3.18
10,10	2.98
11,11	2.82
12,12	2.69
13,13	2.58
14,14	2.48
15,15	2.40
16,16	2.33
17,17	2.27
18,18	2.22
19,19	2.17
20,20	2.12

[1] Adapted from References 18.17 and 18.18 in section 18.0.

TABLE 301–5—PROCEDURES FOR ESTIMATING S_o

If the estimated LOD (LOD_1, expected approximate LOD concentration level) is no more than twice the calculated LOD or an analyte in a sample matrix was collected prior to an analytical measurement, use Procedure I as follows.	If the estimated LOD (LOD_1, expected approximate LOD concentration level) is greater than twice the calculated LOD, use Procedure II as follows.
Procedure I:	*Procedure II:*
Determine the LOD by calculating a method detection limit (MDL) as described in 40 CFR part 136, appendix B.	Prepare two additional standards (LOD_2 and LOD_3) at concentration levels lower than the standard used in Procedure I (LOD_1). Sample and analyze each of these standards (LOD_2 and LOD_3) at least seven times. Calculate the standard deviation (S_2 and S_3) for each concentration level. Plot the standard deviations of the three test standards (S_1, S_2 and S_3) as a function of concentration. Draw a best-fit straight line through the data points and extrapolate to zero concentration. The standard deviation at zero concentration is S_o. Calculate the LOD_0 (referred to as the calculated LOD) as 3 times S_o.

* * * * *

[FR Doc. 2018–05400 Filed 3–19–18; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 300

[Docket No. 180202117–8117–01]

RIN 0648–BH58

Pacific Halibut Fisheries; Catch Sharing Plan

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Interim final rule; request for comments.

SUMMARY: NMFS is implementing this interim final rule to establish regulations for 2018 Pacific halibut catch limits in the following International Pacific Halibut Commission (IPHC) Regulatory Areas: Area 2C (Southeast Alaska), Area 3A (Central Gulf of Alaska), Area 3B (Western Gulf of Alaska), and Area 4 (subdivided into five areas, 4A through 4E, in the Bering Sea and Aleutian Islands of Western Alaska). This interim final rule revises a catch sharing plan (CSP) for guided sport (charter) and commercial individual fishing quota (IFQ) halibut fisheries in Area 2C and Area 3A, revises regulations applicable to the charter halibut fisheries in Area 2C and Area 3A, and revises a CSP for the commercial IFQ and Western Alaska Community Development Quota (CDQ) halibut fisheries in Areas 4C, 4D, and 4E. This action is necessary because the IPHC, at its annual meeting, did not recommend new catch limits or specific CSP allocations and charter management measures for Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, and 4E for 2018, and the 2017 IPHC regulations are in effect until superseded. This interim final rule is necessary because immediate action is needed to ensure that halibut catch limits, charter halibut fishery management measures, and CSP allocations are in place at the start of the commercial IFQ and CDQ halibut fishery on March 24, 2018, that better protect the declining Pacific halibut resource. This action is intended to enhance the conservation of Pacific halibut and is within the authority of the Secretary of Commerce (Secretary) to establish additional regulations

(1) EPA APPROVED NORTH CAROLINA REGULATIONS—Continued

State citation	Title/subject	State effective date	EPA approval date	Explanation
*	*	*	*	*

* * * * *

[FR Doc. 2019–10724 Filed 5–22–19; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants for Source Categories

CFR Correction

In Title 40 of the Code of Federal Regulations, Part 63, 63.8980 to end of part 63, revised as of July 1, 2018, make the following corrections in Subpart UUUUU:

■ 1. On page 188, in § 63.10021, paragraph (e)(9) is revised to read as follows:

§ 63.10021 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

* * * * *

(e) * * *

(9) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in § 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, report the date of all tune-ups electronically, in accordance with § 63.10031(f). The tune-up report date is the date when tune-up requirements in paragraphs (e)(6) and (7) of this section are completed.

* * * * *

■ 2. On page 195, in § 63.10031, paragraphs (f) introductory text, (f)(1), (2), (4), and (f)(6) introductory text are revised to read as follows:

§ 63.10031 What reports must I submit and when?

* * * * *

(f) On or after July 1, 2020, within 60 days after the date of completing each performance test, you must submit the performance test reports required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *https://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using those test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority.

(1) On or after July 1, 2020, within 60 days after the date of completing each CEMS (SO_2, PM, HCl, HF, and Hg) performance evaluation test, as defined in § 63.2 and required by this subpart, you must submit the relative accuracy test audit (RATA) data (or, for PM CEMS, RCA and RRA data) required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (*https://cdx.epa.gov*). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (*https://www.epa.gov/ttn/chief/ert/index.html*). Only RATA data compounds listed on the ERT website are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph. The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the delegated authority, owners or operators shall also submit these RATAs to the delegated authority in the format specified by the delegated authority. Owners or operators shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in § 63.2 and as required in this chapter.

(2) On or after July 1, 2020, for a PM CEMS, PM CPMS, or approved alternative monitoring using a HAP metals CEMS, within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st, you must submit quarterly reports to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. For each reporting period, the quarterly reports must include all of the calculated 30-boiler operating day rolling average values derived from the CEMS and PM CPMS.

* * * * *

(4) On or after July 1, 2020, submit the compliance reports required under paragraphs (c) and (d) of this section and the notification of compliance status required under § 63.10030(e) to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format.

* * * * *

(6) Prior to July 1, 2020, all reports subject to electronic submittal in paragraphs (f) introductory text, (f)(1), (2), and (4) of this section shall be submitted to the EPA at the frequency specified in those paragraphs in electronic portable document format (PDF) using the ECMPS Client Tool. Each PDF version of a submitted report must include sufficient information to

assess compliance and to demonstrate that the testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file:

* * * * *

[FR Doc. 2019–10766 Filed 5–22–19; 8:45 am]

BILLING CODE 1301–00–D

DEPARTMENT OF TRANSPORTATION

Office of the Secretary

49 CFR Part 10

[Docket No. OST–2016–0028]

RIN 2105–AE46

Maintenance of and Access to Records Pertaining to Individuals

AGENCY: Office of the Secretary (OST), U.S. Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: On October 4, 2018, the Department of Transportation issued a notice of proposed rulemaking requesting comment on proposed exemptions from certain requirements of the Privacy Act for the Department's insider threat program system of records. The exemptions are necessary to protect properly classified information from disclosure, preserve the integrity of insider threat inquiries, and protect the identities of sources in such inquiries and any related investigations. The Department received no comments on this proposed rule. As a result, this final rule will finalize the proposed rule without change.

DATES: This final rule is effective May 23, 2019.

ADDRESSES: You may access docket number DOT–OST–2016–0028 by any of the following methods:

- *Federal Rulemaking Portal:* Go to *http://www.regulations.gov.*
- *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Ave. SE, West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* West Building Ground Floor, Room W12–140, 1200 New Jersey Ave. SE, between 9:00 a.m. and 5:00 p.m. ET, Monday through Friday, except Federal holidays.
- *Fax:* 202–493–2251.

FOR FURTHER INFORMATION CONTACT: Claire Barrett, Departmental Chief Privacy Officer, Office of the Chief Information Officer, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590 or *privacy@dot.gov* or (202) 366–8135.

SUPPLEMENTARY INFORMATION: DOT identifies a system of records that is exempt from one or more provisions off the Privacy Act (pursuant to 5 U.S.C. 552a(j) or (k)) both in the system of records notice published in the **Federal Register** for public comment and in an appendix to DOT's regulations implementing the Privacy Act (49 CFR part 10, appendix). This rule exempts records in the Insider Threat Program system of records from subsections (c)(3) (Accounting of Disclosures), (d) (Access to Records), (e)(1) and (e)(4)(G) through (I) (Agency Requirements) and (f) (Agency Rules) of the Privacy Act to the extent that records are properly classified, in accordance with 5 U.S.C.552a(k)(1), or consist of investigatory material compiled for law enforcement purposes in accordance with 5 U.S.C. 552a(k)(2).

As DOT received no comments on the notice of proposed rulemaking published on October 4, 2018 (83 FR 50053), we are finalizing the proposed rule without change.

Regulatory Analysis and Notices

A. Executive Order 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures

DOT considered the impact of this rulemaking action under Executive Orders 12866 and 13563 (January 18, 2011, ''Improving Regulation and Regulatory Review''), and DOT Order 2100.6, ''Policies and Procedures for Rulemakings.'' DOT has determined that this action will not constitute a significant regulatory action within the meaning of Executive Order 12866 and within the meaning of DOT regulatory policies and procedures. This rulemaking has not been reviewed by the Office of Management and Budget. This rulemaking will not result in any costs. Since these records would be exempt from certain provisions of the Privacy Act, DOT would not have to expend any funds in order to administer those aspects of the Act.

B. Regulatory Flexibility Act

DOT has evaluated the effect these changes will have on small entities and does not believe that this rulemaking will impose any costs on small entities because the reporting requirements themselves are not changed and because the rule applies only to information on individuals that is maintained by the Federal Government or that is already publicly available. Therefore, I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities.

C. National Environmental Policy Act

DOT has analyzed the environmental impacts of this final action pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and has determined that it is categorically excluded pursuant to DOT Order 5610.1C, Procedures for Considering Environmental Impacts (44 FR 56420, Oct. 1, 1979). Categorical exclusions are actions identified in an agency's NEPA implementing procedures that do not normally have a significant impact on the environment and therefore do not require either an environmental assessment (EA) or environmental impact statement (EIS). See 40 CFR 1508.4. In analyzing the applicability of a categorical exclusion, the agency must also consider whether extraordinary circumstances are present that would warrant the preparation of an EA or EIS. *Id.* Paragraph 3.c.5 of DOT Order 5610.1C incorporates by reference the categorical exclusions for all DOT Operating Administrations. This action is covered by the categorical exclusion listed in the Federal Highway Administration's implementing procedures, ''[p]romulgation of rules, regulations, and directives.'' 23 CFR 771.117(c)(20). The purpose of this rulemaking is to amend the Appendix to DOT's Privacy Act regulations. The Department does not anticipate any environmental impacts and there are no extraordinary circumstances present in connection with this rulemaking.

E. Executive Order 13132 (Federalism)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 13132, Federalism, dated August 4, 1999, and it has been determined that it will not have a substantial direct effect on, or sufficient Federalism implications for, the States, nor would it limit the policymaking discretion of the States. Therefore, the preparation of a Federalism Assessment is not necessary.

F. Executive Order 13084 (Consultation and Coordination With Indian Tribal Governments)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 13084 (''Consultation and Coordination with Indian Tribal Governments''). Because it would not effect on Indian Tribal Governments, the funding and consultation requirements of Executive Order 13084 do not apply.

G. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501, *et seq.*),

southeast (from west to east). The area is defined as that airspace upward from 700 feet above the surface within the area bounded by a line beginning at lat. 58°27′33″ N, long. 134°37′40″ W, to lat. 58°13′13″ N, long. 134°11′51″ W, to lat. 58°05′59″ N, long. 134°21′04″ W, to lat. 58°10′51″ N, long. 134°59′18″ W, to lat. 58°23′41″ N, long. 135°31′13″ W, to lat. 58°32′22″ N, long. 135°18′32″ W, to lat. 58°27′17″ N, long. 135°01′27″ W, thence to the point of beginning. This modification reduces the airspace area to only that area necessary to contain IFR operations as they transition between the airport and en route environments. Also, Class E airspace extending upward from 1,200 feet above the surface designated for Juneau International Airport is removed since this airspace is wholly contained within the Southeast Alaska Class E en route airspace, and duplication is not necessary.

This action also makes an editorial change to the Class D airspace legal description replacing Airport/Facility Directory with Chart Supplement.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a Regulatory Evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71 —DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11C, Airspace Designations and Reporting Points, dated August 13, 2018, and effective September 15, 2018, is amended as follows:

Paragraph 5000 Class D Airspace.

* * * * *

AAL AK D Juneau, AK [Amended]

Juneau International Airport, AK
(Lat. 58°21′17″ N, long. 134°34′42″ W)

That airspace extending upward from the surface to and including 2,500 feet MSL within a 3-mile radius of Juneau International Airport, and within 2.5 miles each side of the 271° bearing from the airport extending from the 3-mile radius to 5.2 miles west of the airport, and within 1 mile southwest and 2.6 miles northeast of the airport 135° bearing extending from the airport 3-mile radius to 5 miles southeast of the airport, excluding that airspace below 2,000 feet MSL within the area bounded by a line beginning at lat. 58°19′35″ N, long. 134°24′31″ W, to lat. 58°19′02″ N, long. 134°25′33″ W, to lat. 58°20′16″ N, long. 134°27′28″ W, to lat. 58°20′34″ N, long. 134°26′22″ W, thence to the point of beginning. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Chart Supplement.

Paragraph 6002 Class E Airspace Areas Designated as Surface Areas.

* * * * *

AAL AK E2 Juneau, AK [Amended]

Juneau International Airport, AK
(Lat. 58°21′17″ N, long. 134°34′42″ W)

That airspace extending upward from the surface within a 3-mile radius of Juneau International Airport, and within 2.5 miles each side of the 271° bearing from the airport extending from the 3-mile radius to 5.2 miles west of the airport, and within 1 mile southwest and 2.6 miles northeast of the airport 135° bearing extending from the airport 3-mile radius to 5 miles southeast of the airport, excluding that airspace below 2,000 feet MSL within the area bounded by a line beginning at lat. 58°19′35″ N, long. 134°24′31″ W, to lat. 58°19′02″ N, long. 134°25′33″ W, to lat. 58°20′16″ N, long. 134°27′28″ W, to lat. 58°20′34″ N, long. 134°26′22″ W, thence to the point of beginning. This Class E airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Chart Supplement.

Paragraph 6004 Class E Airspace Designated as an Extension to a Class D or Class E Surface Area.

* * * * *

AAL AK E4 Juneau, AK [Removed]

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface of the Earth.

* * * * *

AAL AK E5 Juneau, AK [Amended]

Juneau International Airport, AK
(Lat. 58°21′17″ N, long. 134°34′42″ W)

That airspace upward from 700 feet above the surface within the area bounded by a line beginning at lat. 58°27′33″ N, long. 134°37′40″ W, to lat. 58°13′13″ N, long. 134°11′51″ W, to lat. 58°05′59″ N, long. 134°21′04″ W, to lat. 58°10′51″ N, long. 134°59′18″ W, to lat. 58°23′41″ N, long. 135°31′13″ W, to lat. 58°32′22″ N, long. 135°18′32″ W, to lat. 58°27′17″ N, long. 135°01′27″ W, thence to the point of beginning.

Issued in Seattle, Washington, on November 1, 2018.

Shawn M. Kozica,

Manager, Operations Support Group, Western Service Center.

[FR Doc. 2018–24721 Filed 11–13–18; 8:45 am]

BILLING CODE 4910–13–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 60, and 63

[EPA–HQ–OAR–2016–0510; FRL–9986–42–OAR]

RIN 2060–AS95

Testing Regulations for Air Emission Sources

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action amends certain existing testing regulations to reflect corrections, updates, and the addition of alternative equipment and methods for source testing of emissions. These revisions will improve the quality of data and provide flexibility in the use of

approved alternative procedures. The revisions do not impose any new substantive requirements on source owners or operators.

DATES: The final rule is effective on January 14, 2019. The incorporation by reference materials listed in the rule are approved by the Director of the Federal Register as of January 14, 2019.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2016–0510. All documents in the docket are listed on the *http://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy. Publicly available docket materials are available electronically through *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Lula H. Melton, Office of Air Quality Planning and Standards, Air Quality Assessment Division (E143–02), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541–2910; fax number: (919) 541–0516; email address: *melton.lula@epa.gov.*

SUPPLEMENTARY INFORMATION: The supplementary information in this preamble is organized as follows:

Table of Contents

I. General Information

A. Does this action apply to me?

The revisions promulgated in this final rule apply to industries that are subject to the current provisions of 40 Code of Federal Regulations (CFR) parts 51, 60, and 63. We did not list all of the specific affected industries or their North American Industry Classification System (NAICS) codes herein since there are many affected sources in numerous NAICS categories. If you have any questions regarding the applicability of this action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13.

B. What action is the agency taking?

We are promulgating corrections and updates to regulations for source testing of emissions. More specifically, we are correcting typographical and technical errors, updating obsolete testing procedures, adding approved testing alternatives, and clarifying testing requirements.

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by January 14, 2019. Under section 307(d)(7)(B) of the CAA, only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements that are the subject of this final rule may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

II. Background

The revisions to testing regulations for air emission sources were proposed in the **Federal Register** on January 26, 2018 (83 FR 3636). The public comment period ended March 27, 2018, and 83 comment letters were received from the public; 23 of the comment letters were relevant, and the other 60 comment letters were considered beyond the scope of the proposed rule. This final rule was developed based on public comments that the agency received on the proposed rule.

III. Summary of Amendments

A. Method 201A of Appendix M of Part 51

In Method 201A, in section 12.5, the denominator of equation 24 is corrected

as proposed; the proposed c'_p in the denominator is changed to C_p' to be consistent with the nomenclature in section 12.1. The c_p in the numerator is changed to C_p also to be consistent with the nomenclature in section 12.1.

B. Method 204 of Appendix M of Part 51

In Method 204, in section 8.2, the statement regarding equation 204–2 is corrected to ''The NEAR must be ≤0.05,'' as proposed.

C. Method 205 of Appendix M of Part 51

In Method 205, section 2.1.1 is revised to allow the use of National Institute of Standards and Technology (NIST)-traceable transfer standards to calibrate the gas dilution system as proposed. The agency continues to believe that these standards are widely available and provide the accuracy necessary to perform the calibration. Section 2.1.1 is also revised as proposed to require testers to report the results of the calibration of the dilution system to enable the regulatory authority to review this information.

D. General Provisions (Subpart A) of Part 60

In the General Provisions of part 60, § 60.17(h) is revised as proposed to add ASTM D6216–12 to the list of incorporations by reference and to re-number the remaining consensus standards that are incorporated by reference in alpha-numeric order.

E. Fossil-Fuel-Fired Steam Generators (Subpart D) Part 60

In a change from proposal, the allowed filter temperature in § 60.46(b)(2)(i) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

F. Electric Utility Steam Generating Units (Subpart Da) Part 60

In a change from proposal, the allowed filter temperature in § 60.50Da (b)(1)(ii)(A) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

G. Industrial-Commercial-Institutional Steam Generating Units (Subpart Db) Part 60

In a change from proposal, the allowed filter temperature in § 60.46b(d)(4) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

H. Small Industrial-Commercial-Institutional Steam Generating Units (Subpart Dc) Part 60

In a change from proposal, the allowed filter temperature in § 60.45c(a)(5) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

I. Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989 and on or Before September 20, 1994 (Subpart Ea) Part 60

In a change from proposal, the allowed filter temperature in § 60.58a(b)(3) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

J. Glass Manufacturing Plants (Subpart CC) Part 60

In a change from proposal, the allowed filter temperatures in §§ 60.293(f) and 60.296(d)(2) are not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

K. New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces (Subpart QQQQ) Part 60

In subpart QQQQ, in Method 28WHH, in section 13.5.1, equation 8 is corrected as proposed.

L. Method 2B of Appendix A–1 of Part 60

In Method 2B, in section 12.1, the definition of ambient carbon dioxide concentration is revised as proposed. The agency continues to believe that the global monthly mean $(CO_2)_a$ concentration varies over time. Also, a website link is added to the definition as specified at proposal.

M. Method 5 of Appendix A–3 of Part 60

In a change from proposal, allowed filter temperatures in Method 5, sections 2.0, 6.1.1.2, 6.1.1.6, 6.1.1.7, and 8.5 are not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

Section 6.1.1.9 is revised as proposed to allow the use of a single temperature sensor in lieu of two temperature sensors on the dry gas meter as allowed by Technical Information Document 19 (TID–19) and the approved broadly applicable alternative, ALT–117 (see *https://www.epa.gov/emc*). Consistent with our response to the comment regarding allowing flexibility for the weighing container in section 11.2.1, Method 5B, the first sentence in section 11.2.1, Method 5 is revised similarly.

N. Method 5B of Appendix A–3 of Part 60

In a change from proposal, the allowed filter temperatures in Method 5B, sections 2.0, 6.1, and 8.2 are not revised. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating

systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

Section 11.0 is revised as proposed to replace the reference to Method 5, section 11.0 with specific analytical procedures and to report the results using Figure 5B–1 for complete data review. Section 17.0 is revised as proposed to delete the word ''Reserved'' from the title, and Figure 5B–1 (Analytical Data Sheet) is added.

O. Method 5I of Appendix A–3 of Part 60

In a change from proposal, Method 5I, sections 2.1 and 8.5.2.2 are not revised to tighten the allowed filter temperatures. Based on comments we received on the proposed revisions, we are deferring finalizing the proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

P. Method 7 of Appendix A–4 of Part 60

In Method 7, sections 10.1.2 and 11.3 reference erroneous sections; the correct section is inserted, as proposed. The proposed referenced section 10.1.1.2 is changed to 10.1.1 to include procedures in both sections 10.1.1.1 and 10.1.1.2.

Q. Method 8 of Appendix A–4 of Part 60

As proposed, Method 8, sections 6.1.1.1 through 6.1.1.4 are renumbered to 6.1.1.2 through 6.1.1.5; a new section 6.1.1.1 is added to clarify the requirements that apply to the probe nozzle; and, in response to comments, Figure 8–1 (Sulfuric Acid Sampling Train) is corrected by: (1) Modifying the impinger graphics to make it consistent with the text in section 6.1.1.4 and (2) revising the proposed label S-Type Pitot Tube to Type S Pitot Tube for consistency. The proposed first sentence in section 6.1.1.1 is revised to ''Borosilicate or quartz glass with a sharp, tapered leading edge and coupled to the probe liner using a polytetrafluoroethylene (PTFE) or glass-lined union (*e.g.,* fused silica, Silico, or equivalent).'' Based on a public comment that recommended adding Silco coated stainless steel unions as an option for Teflon unions, and for consistency with other test methods, we have replaced Teflon with the generic option polytetrafluoroethylene (PTFE).

R. Method 18 of Appendix A–6 of Part 60

In Method 18, in section 13.1, the erroneous paragraph (c) designation is re-designated as (b), as proposed.

S. Method 22 of Appendix A–7 of Part 60

In Method 22, sections 11.2.1 and 11.2.2 are revised as proposed to allow digital photography to be used for a subset of the recordkeeping requirements. As proposed, section 11.2.3 is added to specify the requirements for digital photographic records. In response to comments on the proposal, the next to the last sentence in section 11.2.3 regarding photographs that must be taken within 15 minutes of the observation period is revised from the proposal, and another sentence is added to provide clarity. The revised and new sentences read: ''The photograph(s) representing the environmental conditions including the sky conditions and the position of the sun relative to the observer and the emission point must be taken within a reasonable time of the observation (*i.e.,* 15 minutes). When observations are taken from exactly the same observation point on a routine basis (*e.g.,* daily) and as long as there are no modifications to the units depicted, only a single photograph each day is necessary to document the observer's location relative to the emissions source, the process unit being observed, and the location of potential and actual emission points.'' The agency notes that ALT–109 (see *https://www.epa.gov/emc*) is the associated broadly applicable alternative that allows the use of digital photographs for specific recordkeeping requirements.

T. Method 26 of Appendix A–8 of Part 60

As proposed, Method 26, section 6.2.2 is revised to allow the use of glass sample storage containers as an option to allow flexibility and to be consistent with Method 26A. The proposed title of section 6.2.2, ''Storage Bottles,'' is changed to ''Storage Containers'' to be consistent with the language in section 6.2.2.

U. Method 26A of Appendix A–8 of Part 60

As proposed, in Method 26A, section 6.2.1 is revised to remove the language regarding sample storage containers. In response to comments on our proposal, we have determined that high-density polyethylene is an acceptable material for sample storage containers in addition to the currently allowed glass. Therefore, in a new section 6.2.4., we have specified that both high-density polyethylene and glass are acceptable sample storage containers.

V. Test Method 28WHH of Appendix A–8 of Part 60

In Test Method 28WHH, equation 8 in section 13.5.1 is corrected, as proposed.

W. Performance Specification 1 of Appendix B of Part 60

As proposed, in Performance Specification 1, references to ASTM D6216–98 (in sections 2.1, 3.1, 6.1, 8.1(1), 8.1(3)(ii), 8.2(1), 8.2(2), 8.2(3), 9.0, 12.1, 13.0, 13.1, 13.2, and 16.0 paragraph 8) are replaced with ASTM D6216–12. As noted at proposal, if the initial certification of the continuous opacity monitoring system (COMS) has already occurred using D6216–98, D6216–03, or D6216–07, it will not be necessary to recertify using D6216–12. In response to comments on our decision to add ASTM D6216 to the list of consensus standards, the April 1998 publication date for ASTM D6216 in paragraph 8 in section 16.0 is replaced with October 2012, the ASTM D6216–12 publication date. In response to comments, for consistency with section 2.1, and for purposes of clarification, the note at the end of section 2.1 is added to section 13.0.

X. Performance Specification 2 of Appendix B of Part 60

In Performance Specification 2, section 13.2 is replaced with a table that indicates the relative accuracy performance specifications, as proposed. Given that the equals to (=) signs were erroneously omitted from several of the < and > values during publication of the table in the proposed rule, these values have been corrected.

Y. Performance Specification 3 of Appendix B of Part 60

In Performance Specification 3, the two sentences in section 12.0 that read, ''Calculate the arithmetic difference between the RM and the CEMS output for each run. The average difference of the nine (or more) data sets constitute the RA.'' are deleted, as proposed; these two sentences are no longer necessary since equations 3–1 and 3–2 would be moved from section 13.2 to section 12.0. The sentence, ''Calculate the RA using equations 3–1 and 3–2.'' is added to the beginning of section 12.0.

Z. Performance Specification 11 of Appendix B of Part 60

In Performance Specification 11, section 13.1, the word ''average'' erroneously exists in the second sentence and is deleted, as proposed.

AA. Performance Specification 15 of Appendix B of Part 60

As proposed, in Performance Specification 15, section 13.0 is added as ''Method Performance [Reserved].''

BB. Performance Specification 18 of Appendix B of Part 60

As proposed, in Performance Specification 18, in section 11.8.7, the last sentence is revised to clarify the duration of the drift check. In Table 1, the erroneous acronym ''NO_2'' is replaced with ''NO,'' as proposed. In the appendix of Performance Specification 18, the inadvertently omitted reserved section 12.0 is added, as proposed.

CC. Procedure 1 of Appendix F of Part 60

As proposed, in Procedure 1, in section 5.1.2 (1), the sentence immediately following the table that reads, ''Challenge the CEMS three times at each audit point, and use the average of the three responses in determining accuracy.'' is replaced with, ''Introduce each of the audit gases, three times each for a total of six challenges. Introduce the gases in such a manner that the entire CEMS is challenged. Do not introduce the same gas concentration twice in succession.'' In order to obtain six distinct readings during the cylinder gas audit (CGA), the same gas must not be introduced twice in succession, and this revised language accurately reflects this standard scientific practice. As also proposed, in section 5.1.2 (3), the reference to EPA's traceability protocol for gaseous calibration standards is updated, and the language regarding the use of EPA Method 205 for dilution of audit gases is clarified.

DD. General Provisions (Subpart A) of Part 63

Sections 63.7(g)(2), 63.7(g)(2)(v), and 63.8(e)(5)(i) of the General Provisions (subpart A) of part 63 are revised, as proposed, to require the reporting of specific test data for continuous monitoring system performance evaluation tests and ongoing quality assurance (QA) tests. These data elements are required regardless of the format of the report, *i.e.,* electronic or paper. These modifications will ensure that performance evaluation and QA test reporting include all data necessary for the compliance authority to assess and assure the quality of the reported data and that the reported information describes and identifies the specific unit covered by the evaluation test report. In response to comment, we specified the level of reporting needed for continuous parameter monitoring systems (CPMS) versus other continuous monitoring systems including continuous emission monitoring systems (CEMS), COMS, and predictive emissions monitoring systems (PEMS).

EE. Wool Fiberglass Manufacturing (Subpart NNN) Part 63

In a change from proposal, the allowed filter temperature in § 63.1385(a)(5) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

FF. Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Subpart DDDDD) Part 63

As proposed, in Table 6 of subpart DDDDD, row 1.f. is revised to allow the use of EPA SW–846–7471B (for liquid samples) in addition to EPA SW–846–7470A for measuring mercury to allow for compliance flexibility.

GG. Coal- and Oil-Fired Electric Utility Steam Generating Units (Subpart UUUUU) Part 63

In a change from proposal, the allowed filter temperature in § 63.10010(h)(7)(i)(1) is not revised. Based on comments we received on the proposed revisions, we are deferring finalizing proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

As proposed, in Table 5, Method 5I is specified as a test method option because, as explained at proposal, Method 5I is designed for low particulate matter (PM) application.

HH. Method 303 of Appendix A of Part 63

In Method 303, section 12.4, equation 303–3 is corrected, as proposed, by inserting ''where y = '' in front of the equation.

II. Method 308 of Appendix A of Part 63

As proposed, in Method 308, deionized distilled water replaces the aqueous n-proponal solution; the affected sections are 2.0, 7.2.2, 7.2.3.3, and 11.3.2. Section 7.2.2, which defines the aqueous n-proponal solution, is removed, as proposed. In section 7.2.3.3, the erroneous ''four'' is replaced as proposed, with ''three'' in the sentence that reads ''Pipette 5, 15, and 25 ml of this standard, respectively into four 50-ml volumetric flasks.'' Section 8.1.2 is revised, as proposed, to require a leak check prior to the sampling run (in addition to after the sampling run) for QA purposes; as explained at proposal, requiring a leak check prior to the sampling run would potentially save time and money. In section 9.1, methanol spike recovery check is added as a quality control (QC) measure in Table 9.1, as proposed. In section 12.1, variables used in equations 308–4 and 308–5 are added and section 12.5, which includes equations 308–4 and 308–5, is added, as proposed. In section 13.0, the title ''Reserved'' is replaced with ''Method Performance'' and QA requirements would be added to be consistent with other methods, as proposed. The erroneous proposed paragraph (a) of section 13.0 is replaced, as proposed, with ''Calibration standards must meet the requirements in section 10.2.1 or 10.2.2 as applicable.''

JJ. Method 320 of Appendix A of Part 63

In section 8.2.2.4, the denominator in equation 2 is corrected from P_{SS} to P_S, as proposed. In section 9.2.3, the word ''where'' in the statement, ''Calculate the dilution ratio using the tracer gas as follows: where:'' is deleted, as proposed. Also in section 9.2.3, the inadvertently superscripted ''dir'' on the definition of spike is subscripted, as proposed.

KK. Method 323 of Appendix A of Part 63

In Method 323, section 12.9, the denominator in equation 323–8 is corrected, as proposed.

LL. Method 325A of Appendix A of Part 63

In Method 325A, section 8.2.1.3 is revised, as proposed, to clarify that only one extra sampling site is required near known sources of volatile organic compounds (VOCs) when the source is located both within 50 meters of the boundary and between two monitors. Based on a public comment we received on the proposed regulatory text, wording changes have been made to the language in section 8.2.1.3. As proposed, the label under Figure 8.1 is corrected from ''Refinery (20% angle)'' to ''Refinery (20° angle).'' Section 8.2.3.2 is revised, as proposed, to include facilities with a monitoring perimeter length equal to 7,315 meters (24,000 feet). Section 8.2.3.3 is added, as

proposed, to provide clarification and an equivalent procedure in Option 2 (linear distance between sites) for site locations that parallel section 8.2.2.2.4 in Option 1 (radial distance between sites). In response to comments, section 8.4.3 is added to address worker safety during extenuating circumstances.

MM. Method 325B of Appendix A of Part 63

In Method 325B, section 9.3.2 is revised, as proposed, to correct an error in the number of field blank samples required for a sampling period and to provide consistency with the sample analysis required in Method 325B. In sections 9.13 and 11.3.2.5, the erroneous reference to section 10.6.3 is corrected to 10.0, as proposed. Also in section 11.3.2.5, the erroneous reference to section 10.9.5 is corrected to 9.13, as proposed. Section 12.2.2 is revised, as proposed, to correct the calculation of target compound concentrations at standard conditions, and the erroneous reference to U_{std} in the note in section 12.2.2 is revised to U_{NTP}. Sections 12.2.3 and 12.2.4 are deleted, as proposed, because the equations for target concentrations are incorrect. Table 17–1 is revised, as proposed, to add inadvertently omitted QC criteria from section 9.3.3.

IV. Public Comments on the Proposed Rule

Eighty-three (83) comment letters were received from the public; 23 of the comment letters were relevant, and the other 60 comment letters were considered as beyond the scope of the proposed rule. The public comments and the agency's responses are summarized in the Response to Comments document located in the docket for this rule. See the **ADDRESSES** section of this preamble.

A summary of the relevant portions of significant comments that we received on the proposal and agency responses are presented below.

Comment: Three commenters provided comments on our proposed revisions to the General Provisions (Subpart A) of Part 63. One commenter stated that the proposed revisions impose new requirements on CMS performance evaluations and QA testing for types of monitors not previously subject to such requirements. Another commenter remarked that the proposed revisions to various requirements in Part 63 revisions were vague. Yet another commenter remarked that the proposed revisions to § 63.8(e)(5) would shorten the CMS performance evaluation reporting period for CMS associated with performance tests.

Response: We disagree with the comment that the proposed changes to § 63.8(e)(5)(i) would impose new requirements given that at proposal, the agency had explained that they were intended to clarify and codify data elements and reporting requirements that are already routinely requested by the Administrator's delegated authorities. With regard to § 63.8(e)(5), in a change from proposal, we have retained the existing requirement that allows for the simultaneous submission of the report of a CMS performance evaluation with results of performance testing required under 40 CFR 63.7. We also edited the final rule language for 40 CFR 63.7(g)(2)(v) to improve clarity and to eliminate confusion.

Comment: Fifteen commenters provided comments arguing against the proposal to tighten the filter temperature tolerance in 40 CFR 60.46(b)(2)(i); 60.50Da(b)(1)(ii)(A); 60.45c(a)(5); 60.58a(b)(3); 60.293(f); 60.296(d)(2); 63.1385(a)(5); and sections 2.0, 6.1.1.2, 6.1.1.6, 6.1.1.7 and 8.5 of Method 5, Appendix A–3 of Part 60. They cited issues that included: weather (*e.g.,* ambient temperature fluctuations and windy conditions); costs; lack of justification and data for the revision; inconsistent language (*e.g.,* the use of ''shall'' vs. ''may'' and proposed revisions to temperature tolerance in Methods 5, 5B, and 5I but not in Methods 5D, 5E, and 5F); and safety risks. Nine commenters remarked that ambient conditions (cold climates, wind gusts, etc.) can cause temperature fluctuations that are difficult to manage. More specifically, one commenter stated that the reduced allowable temperature range would be problematic during testing in cold, windy ambient conditions that are persistent in the winter months in northern climates because the time required for temperature recovery after a component change in these conditions could add hours and possibly days to testing programs. One commenter remarked that the proposed ±5 °C is unattainable for sources in cold or windy climates.

Eight commenters stated that alteration or replacement of equipment components would likely be necessary to achieve the proposed temperature tolerances resulting in additional costs. One commenter noted potential equipment improvements, such as increased probe sheath tubing diameter to make room for added insulation around every probe heater; re-design of filter heating ovens; improved sealing and insulation of the openings at the inlet and outlet of filter heating ovens; and/or for sources with high stack temperatures, more frequent use of air-cooled or water-cooled probes. One commenter remarked that this revision would force cold weather stack testers to replace or retrofit equipment with higher power heating devices and possibly more refined control devices which would be costly. One commenter remarked that this revision will most likely require air sampling equipment suppliers to redesign sample probes by either increasing sheath diameter, altering the placement or increasing the number of thermocouples used to control the probe heating system, and/or increasing the insulation around the sample liner. The commenter added that an increase in the diameter of the probe sheath would have a cascading effect either requiring test companies to purchase new sample hot boxes or retrofit existing sample hot boxes to accommodate the increased probe sheath diameter.

Seven commenters stated that neither information nor data was provided to support, justify, or quantify the claimed increased precision of filterable PM measurements, and a few of these commenters noted that the Electric Power Research Institute (EPRI) paper that the EPA used as the basis for tightening the filter temperature tolerance was from a comparison of results measured at four coal-fired power plants.

One commenter requested that the statement in § 60.50Da(b)(1)(ii)(A), ''The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ±5 °C (320 ±9 °F),'' be changed to, ''The probe and filter holder heating system in the sampling train shall be set to provide an average gas temperature of 160 ±5 °C (320 ±9 °F),'' because they believe that this was the agency's intent. Similarly, another commenter requested that the statement in § 60.296(d)(2), ''The probe and filter holder heating system may be set to provide a gas temperature no greater than 177 ±5 °C (320 ±9 °F),'' be changed to, ''The probe and filter holder heating system shall be set to provide an average gas temperature 160 ±5 °C (320 ±9 °F),'' because they believe that this was the agency's intent. One commenter also recommended changing the sentence in Method 5B to, ''The collected sample is then heated in an oven at 160 °C (320 °F) for 6 hours . . . ,'' to, ''The collected sample is then heated in an oven at 160 ±5 °C (320 ±9 °F) for 6 hours . . .,'' to be internally consistent.

Three commenters noted that if the temperature tolerances are changed in Method 5, methods that reference Method 5 (namely Method 5D, section

2.1; Method 5E, section 2.0; and Method 5F, section 2.0) would also need to be revised.

Three commenters remarked that tightening the filter temperature tolerance conflicts with the assertion that the proposed rule will improve the quality of data but will not impose new substantive requirements. Two of the three commenters further remarked that the proposed rule does not meet the requirements of Executive Order 13771 nor the Paperwork Reduction Act (PRA).

Three commenters acknowledged that an improvement in measurement precision could benefit the data quality in limited situations, such as the Mercury and Air Toxics Standards (MATS).

Four commenters remarked that if the proposed revisions to the temperature tolerances lead to a measurable change in reported PM emissions, sources that were previously in compliance with their emission standards may become non-compliant; one commenter added that the opposite situation may occur. One commenter stated that the proposed revision may have the unintended consequence of redefining the filterable PM being measured leading to either higher or lower PM measurements as compared to sampling runs conducted with wider tolerances.

Two commenters mentioned that this revision could result in a potential safety risk. One of the commenters remarked that the added weight and handling difficulties associated with air- or water-cooled probes (if necessary to control the probe temperature) can increase safety risks to testing personnel, and the other commenter remarked that the proposed requirements may require the use of encapsulated probes which are heavy and cumbersome resulting in hazards.

Response: In response to these comments and in a change from proposal, we are deferring finalizing proposed revisions of the temperature tolerances of probe and filter holder heating systems as part of this rulemaking. We will continue to review supporting information and data we received on the proposed rule and may propose either revisions or similar requirements as part of future rulemakings.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by allowing regulated facilities the flexibility to use newly-approved alternative procedures for compliance demonstration purposes, which may result in lower labor costs for some facilities (*e.g.,* allowing digital photography in lieu of manual documentation in EPA Method 22); lower compliance testing costs (*e.g.,* additional sample storage container options now allowed by Method 26); reducing the likelihood of re-testing (*e.g.,* revised QA requirements in Method 308); and expediting data processing (*e.g.,* simplified calculations in Method 325B).

C. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA. The revisions do not substantively revise the existing information collection requirements but simply corrects, updates, and clarifies performance testing and continuous monitoring requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This action will not impose emission measurement requirements beyond those specified in the current regulations, nor does it change any emission standard. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. This action simply corrects and updates existing testing regulations. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

This action involves technical standards. The EPA used ASTM D6216–12 for continuous opacity monitors in Performance Specification 1. The ASTM D6216–12 standard covers the procedure for certifying continuous opacity monitors and includes design and performance specifications, test procedures, and QA requirements to ensure that continuous opacity monitors meet minimum design and calibration

requirements necessary, in part, for accurate opacity monitoring measurements in regulatory environmental opacity monitoring applications subject to 10 percent or higher opacity standards.

The ASTM D6216–12 standard was developed and adopted by the American Society for Testing and Materials (ASTM). The standard may be obtained from *http://www.astm.org* or from the ASTM at 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not establish an environmental health or safety standard. This action is a technical correction to previously promulgated regulatory actions and does not have an impact on human health or the environment.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each house of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects

40 CFR Part 51

Environmental protection, Air pollution control, Performance specifications, Test methods and procedures.

40 CFR Part 60

Environmental protection, Air pollution control, Incorporation by reference, Performance specifications, Test methods and procedures.

40 CFR Part 63

Environmental protection, Air pollution control, Incorporation by reference, Performance specifications, Test methods and procedures.

Dated: November 5, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency amends title 40, chapter I of the Code of Federal Regulations as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

■ 2. Amend appendix M to part 51 as follows:

■ a. Revise section 12.5, equation 24, in Method 201A.

■ b. Revise the last sentence in section 8.2 in Method 204.

■ c. Revise section 2.1.1 in Method 205.

The revisions read as follows:

Appendix M to Part 51—Recommended Test Methods for State Implementation Plans

* * * * *

Method 201A—Determination of PM_{10} and $PM_{2.5}$ Emissions From Stationary Sources (Constant Sampling Rate Procedure)

* * * * *

12.5 * * *

$$t_n = \left[\frac{C_p \sqrt{\Delta p_n}}{C_p' \left[(\Delta p)^{0.5}\right]_{avg}}\right]\left[\frac{t_r}{N_{tp}}\right] \quad \text{(Eq. 24)}$$

* * * * *

Method 204—Criteria for and Verification of a Permanent or Temporary Total Enclosure

* * * * *

8.2 * * *

The NEAR must be ≤0.05.

* * * * *

Method 205—Verification of Gas Dilution Systems for Field Instrument Calibrations

* * * * *

2.1.1 The gas dilution system shall be recalibrated once per calendar year using NIST-traceable flow standards with an uncertainty ≤0.25 percent. You shall report the results of the calibration by the person or manufacturer who carried out the calibration whenever the dilution system is used, listing the date of the most recent calibration, the due date for the next calibration, calibration point, reference flow device (ID, S/N), and acceptance criteria. Follow the manufacturer's instructions for the operation and use of the gas dilution system. A copy of the manufacturer's instructions for the operation of the instrument, as well as the most recent calibration documentation, shall be made available for inspection at the test site.

* * * * *

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 3. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 4. In § 60.17, revise paragraph (h)(177) to read as follows:

§ 60.17 Incorporations by reference.

* * * * *

(h) * * *

(177) ASTM D6216–12, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, approved October 1, 2012; IBR approved for appendix B to part 60.

* * * * *

■ 5. In Appendix A–1 to part 60, revise ''$(CO_2)_a$'' in section 12.1 in Method 2B to read as follows:

Appendix A–1 to Part 60—Test Methods 1 through 2F

* * * * *

Method 2B—Determination of Exhaust Gas Volume Flow Rate From Gasoline Vapor Incinerators

* * * * *

12.1 * * *

$(CO_2)_a$ = Ambient carbon dioxide concentration, ppm (if not measured during the test period, may be assumed to equal the global monthly mean CO_2 concentration posted at *http://www.esrl.noaa.gov/gmd/ccgg/trends/global.html#global_data*).

* * * * *

■ 6. In appendix A–3 to part 60:

■ a. Revise sections 6.1.1.9 and 11.2.1 in Method 5.

■ b. Revise section 11.0 in Method 5B.

■ c. Add section 17.0 in Method 5B.

The revisions and addition read as follows:

Appendix A–3 to Part 60—Test Methods 4 through 5I

* * * * *

Method 5—Determination of Particulate Matter Emissions From Stationary Sources

* * * * *

6.1.1.9 Metering System. Vacuum gauge, leak-free pump, calibrated temperature sensors, dry gas meter (DGM) capable of measuring volume to within 2 percent, and related equipment, as shown in Figure 5–1. Other metering systems capable of maintaining sampling rates within 10 percent of isokinetic and of determining sample volumes to within 2 percent may be used, subject to the approval of the Administrator. When the metering system is used in conjunction with a pitot tube, the system shall allow periodic checks of isokinetic rates. The average DGM temperature for use in the calculations of section 12.0 may be obtained by averaging the two temperature sensors located at the inlet and outlet of the DGM as shown in Figure 5–3 or alternatively from a single temperature sensor located at the immediate outlet of the DGM or the plenum of the DGM.

* * * * *

11.2.1 Container No. 1. Leave the contents in the shipping container or transfer the filter and any loose PM from the sample container to a tared weighing container. Desiccate for 24 hours in a desiccator containing anhydrous calcium sulfate. Weigh to a constant weight, and report the results to the nearest 0.1 mg. For the purposes of this section, the term ''constant weight'' means a difference of no more than 0.5 mg or 1 percent of total weight less tare weight, whichever is greater, between two consecutive weighings, with no less than 6 hours of desiccation time between weighings. Alternatively, the sample may be oven dried at 104 °C (220 °F) for 2 to 3 hours, cooled in the desiccator, and weighed to a constant weight, unless otherwise specified by the Administrator. The sample may be oven dried at 104 °C (220 °F) for 2 to 3 hours. Once the sample has cooled, weigh the sample, and use this weight as a final weight.

* * * * *

Method 5B-Determination of Nonsulfuric Acid Particulate Matter Emissions From Stationary Sources

* * * * *

11.0 Analytical Procedure

11.1 Record and report the data required on a sheet such as the one shown in Figure 5B–1.

11.2 Handle each sample container as follows:

11.2.1 Container No. 1. Leave the contents in the shipping container or transfer the filter and any loose PM from the sample container to a tared non-reactive oven-proof container. Oven dry the filter sample at a temperature of 160 ±5 °C (320 ±9 °F) for 6 hours. Cool in a desiccator for 2 hours, and weigh to constant weight. Report the results to the nearest 0.1 mg. For the purposes of this section, the term ''constant weight'' means a difference of no more than 0.5 mg or 1 percent of total weight less tare weight, whichever is greater, between two consecutive weighings, with no less than 6 hours of desiccation time between weighings.

11.2.2 Container No. 2. Note the level of liquid in the container, and confirm on the analysis sheet whether leakage occurred during transport. If a noticeable amount of leakage has occurred, either void the sample or use methods, subject to the approval of the Administrator, to correct the final results. Measure the liquid in this container either volumetrically to ±1 ml or gravimetrically to ±0.5 g. Transfer the contents to a tared 250 ml beaker, and evaporate to dryness at ambient temperature and pressure. Then oven dry the probe sample at a temperature of 160 ±5 °C (320 ±9 °F) for 6 hours. Cool in a desiccator for 2 hours, and weigh to constant weight. Report the results to the nearest 0.1 mg.

11.2.3 Container No. 3. Weigh the spent silica gel (or silica gel plus impinger) to the nearest 0.5 g using a balance. This step may be conducted in the field.

11.2.4 Acetone Blank Container. Measure the acetone in this container either volumetrically or gravimetrically. Transfer the acetone to a tared 250 ml beaker, and evaporate to dryness at ambient temperature and pressure. Desiccate for 24 hours, and weigh to a constant weight. Report the results to the nearest 0.1 mg.

Note: The contents of Container No. 2 as well as the acetone blank container may be evaporated at temperatures higher than ambient. If evaporation is done at an elevated temperature, the temperature must be below the boiling point of the solvent; also, to prevent ''bumping,'' the evaporation process must be closely supervised, and the contents of the beaker must be swirled occasionally to maintain an even temperature. Use extreme care, as acetone is highly flammable and has a low flash point.

* * * * *

17.0 Tables, Diagrams, Flowcharts, and Validation Data

Container number	Weight of particulate collected, mg		
	Final weight	Tare weight	Weight gain
1.			
2.			
Total:			
Less acetone blank			
Weight of particulate matter			

	Volume of liquid water collected	
	Impinger volume, ml	Silica gel weight, g
Final		
Initial		
Liquid collected		
Total volume collected		g* ml

* Convert weight of water to volume by dividing total weight increase by density of water (1 g/ml).

Figure 5B–1. Analytical Data Sheet

* * * * *

■ 7. In appendix A–4 to part 60:

■ a. Revise sections 10.1.2 and 11.3 in Method 7.

■ b. Redesignate sections 6.1.1.1 through 6.1.1.4 as sections 6.1.1.2 through 6.1.1.5 in Method 8.

■ c. Add a new section 6.1.1.1 in Method 8.

■ d. Revise Figure 8–1 in Method 8.

The revisions and addition read as follows:

Appendix A–4 to Part 60—Test Methods 6 Through 10B

* * * * *

Method 7—Determination of Nitrogen Oxide Emissions From Stationary Sources

* * * * *

10.1.2 Determination of Spectrophotometer Calibration Factor K_c. Add 0 ml, 2.0 ml, 4.0 ml, 6.0 ml, and 8.0 ml of the KNO_3 working standard solution (1 ml = 100 µg NO_2) to a series of five 50-ml volumetric flasks. To each flask, add 25 ml of absorbing solution and 10 ml water. Add 1 N NaOH to each flask until the pH is between 9 and 12 (about 25 to 35 drops). Dilute to the mark with water. Mix thoroughly, and pipette a 25-ml aliquot of each solution into a separate porcelain evaporating dish. Beginning with the evaporation step, follow the analysis procedure of section 11.2 until the solution has been transferred to the 100-ml volumetric flask and diluted to the mark. Measure the absorbance of each solution at the optimum wavelength as determined in section 10.1.1. This calibration procedure must be repeated on each day that samples are analyzed. Calculate the spectrophotometer calibration factor as shown in section 12.2.

* * * * *

11.3 Sample Analysis. Mix the contents of the flask thoroughly, and measure the absorbance at the optimum wavelength used for the standards (section 10.1.1), using the blank solution as a zero reference. Dilute the sample and the blank with equal volumes of water if the absorbance exceeds A_4, the absorbance of the 400-µg NO_2 standard (see section 10.1.3).

* * * * *

Method 8—Determination of Sulfuric Acid and Sulfur Dioxide Emissions From Stationary Sources

* * * * *

6.1.1.1 Probe Nozzle. Borosilicate or quartz glass with a sharp, tapered leading edge and coupled to the probe liner using a polytetrafluoroethylene (PTFE) or glass-lined union (*e.g.,* fused silica, Slico, or equivalent). When the stack temperature exceeds 210 °C (410 °F), a leak-free ground glass fitting or other leak free, non-contaminating fitting must be used to couple the nozzle to the probe liner. It is also acceptable to use a one-piece glass nozzle/liner assembly. The angle of the taper shall be ≤30°, and the taper shall be on the outside to preserve a constant internal diameter. The probe nozzle shall be of the button-hook or elbow design, unless otherwise specified by the Administrator. Other materials of construction may be used, subject to the approval of the Administrator. A range of nozzle sizes suitable for isokinetic sampling should be available. Typical nozzle sizes range from 0.32 to 1.27 cm (⅛ to ½ in) inside diameter (ID) in increments of 0.16 cm (1⁄16 in). Larger nozzles sizes are also available if higher volume sampling trains are used.

* * * * *

17.0 * * *

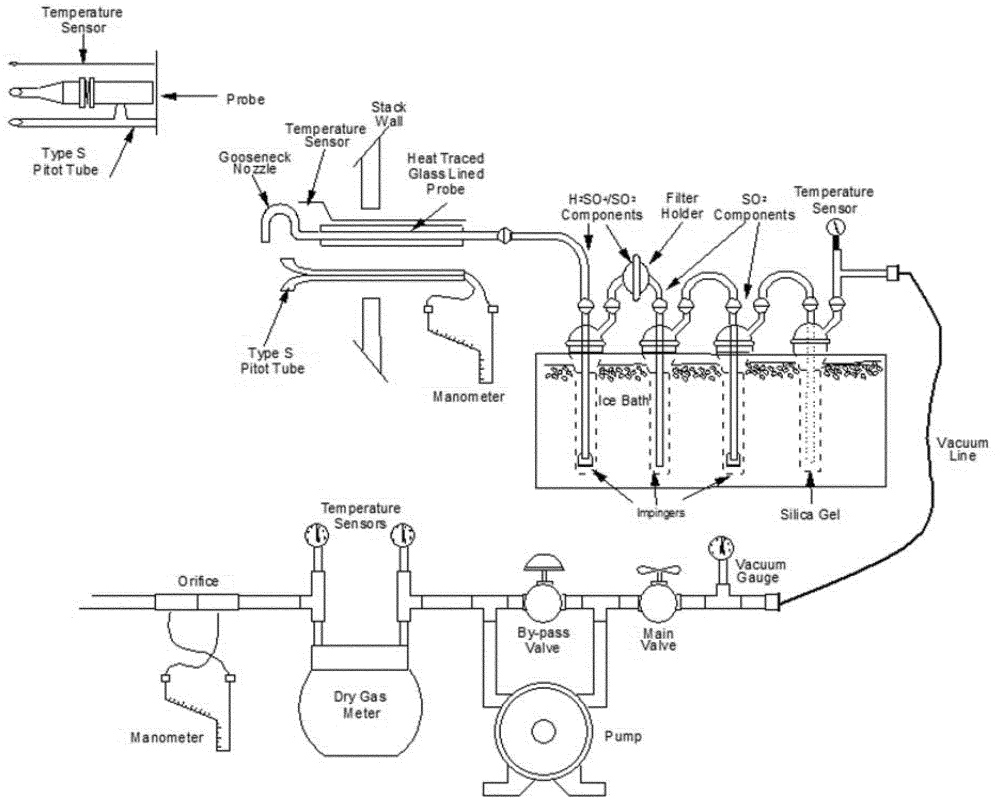

Figure 8-1. Sulfuric Acid Sampling Train

* * * * *

Appendix A–6 to Part 60—[Amended]

■ 8. In Appendix A–6 to part 60, redesignate paragraph (c) as paragraph (b) in section 13.1 in Method 18.

■ 9. In appendix A–7 to part 60:

■ a. Revise sections 11.2.1 and 11.2.2 in Method 22.

■ b. Add section 11.2.3 in Method 22.

The revisions and addition read as follows:

Appendix A–7 to Part 60—Test Methods 19 Through 25E

* * * * *

Method 22—Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

* * * * *

11.2.1 Outdoor Location. Record the following information on the field data sheet (Figure 22–1): Company name, industry, process unit, observer's name, observer's affiliation, and date. Record also the estimated wind speed, wind direction, and sky condition. Sketch the process unit being observed, and note the observer location relative to the source and the sun. Indicate the potential and actual emission points on the sketch. Alternatively, digital photography as described in section 11.2.3 may be used for a subset of the recordkeeping requirements of this section.

11.2.2 Indoor Location. Record the following information on the field data sheet (Figure 22–2): Company name, industry, process unit, observer's name, observer's affiliation, and date. Record as appropriate the type, location, and intensity of lighting on the data sheet. Sketch the process unit being observed, and note the observer location relative to the source. Indicate the potential and actual fugitive emission points on the sketch. Alternatively, digital photography as described in section 11.2.3 may be used for a subset of the recordkeeping requirements of this section.

11.2.3 Digital Photographic Records. Digital photographs, annotated or unaltered, may be used to record and report sky conditions, observer's location relative to the source, observer's location relative to the sun, process unit being observed, potential emission points and actual emission points for the requirements in sections 11.2.1 and 11.2.2. The image must have the proper lighting, field of view and depth of field to properly distinguish the sky condition (if applicable), process unit, potential emission point and actual emission point. At least one digital photograph must be from the point of the view of the observer. The photograph(s) representing the environmental conditions including the sky conditions and the position of the sun relative to the observer and the emission point must be taken within a reasonable time of the observation (*i.e.,* 15 minutes). When observations are taken from exactly the same observation point on a routine basis (*i.e.,* daily) and as long as there are no modifications to the units depicted, only a single photograph each is necessary to document the observer's location relative to the emissions source, the process unit being observed, and the location of potential and actual emission points. Any photographs altered or annotated must be retained in an unaltered format for recordkeeping purposes.

* * * * *

■ 10. In appendix A–8 to part 60:

■ a. Revise section 6.2.2 in Method 26.

■ b. Revise section 6.2.1 in Method 26A.

■ c. Add section 6.2.4 in Method 26A.

■ d. Revise equation 8 in section 13.5.1 in Test Method 28WHH.

The revisions and additions read as follows:

Appendix A–8 to Part 60—Test Methods 26 Through 30B

* * * * *

Method 26—Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources Non-Isokinetic Method

* * * * *

6.2.2 Storage Containers. 100- or 250-ml, high-density polyethylene or glass sample storage containers with Teflon screw cap liners to store impinger samples.

* * * * *

Method 26A—Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources Isokinetic Method

* * * * *

6.2.1 Probe-Liner and Probe-Nozzle Brushes, Wash Bottles, Petri Dishes, Graduated Cylinder and/or Balance, and Rubber Policeman. Same as Method 5, sections 6.2.1, 6.2.2, 6.2.4, 6.2.5, and 6.2.7.

* * * * *

6.2.4 Sample Storage Containers. High-density polyethylene or glass sample storage containers with Teflon screw cap liners to store impinger samples.

* * * * *

Test Method 28WHH for Measurement of Particulate Emissions and Heating Efficiency of Wood-Fired Hydronic Heating Appliances

* * * * *

13.5.1 * * *

$$\sigma_i = (62.56 + (-.0003413 \times T3_i) + (-.00006225 \times T3_i^2)) 0.1337, \text{ lbs/gal} \quad \text{Eq. 8}$$

* * * * *

■ 11. In appendix B to part 60:

■ a. Add the following entries to the list of Performance Specifications in numeric order:

■ i. Performance Specification 12B—Specifications and Test Procedures for Monitoring Total Vapor Phase Mercury Emissions From Stationary Sources Using A Sorbent Trap Monitoring System

■ ii. Performance Specification 17 [Reserved]

■ iii. Performance Specification 18—Performance Specifications and Test Procedures for Gaseous Hydrogen Chloride (HCl) Continuous Emission Monitoring Systems at Stationary Sources

■ iv. PS–18—Appendix A Standard Addition Procedures

■ b. In Performance Specification 1, remove ''D 6216–98'' wherever it appears and add in its place ''D6216–12'', and revise section 2.1, the introductory text of section 13.0, sections 13.1 and 13.2, and paragraph 8. of section 16.0.

■ c. In Performance Specification 2, revise section 13.2.

■ d. In Performance Specification 3, revise sections 12.0 and 13.2.

■ e. In Performance Specification 11, revise section 13.1.

■ f. In Performance Specification 15, add reserved section 13.0.

■ g. In Performance Specification 18, revise section 11.8.7 and table 1 in section 17.0, and add reserved section 12.0 to PS–18.

The revisions and additions read as follows:

Appendix B to Part 60—Performance Specifications

* * * * *

Performance Specification 1—Specifications and Test Procedures for Continuous Opacity Monitoring Systems in Stationary Sources

* * * * *

2.1 ASTM D6216–12 (incorporated by reference, see § 60.17) is the reference for design specifications, manufacturer's performance specifications, and test procedures. The opacity monitor manufacturer must periodically select and test an opacity monitor, that is representative of a group of monitors produced during a specified period or lot, for conformance with the design specifications in ASTM D6216–12. The opacity monitor manufacturer must test each opacity monitor for conformance with the manufacturer's performance specifications in ASTM D6216–12. Note: If the initial certification of the opacity monitor occurred before November 14, 2018 using D6216–98, D6216–03, or D6216–07, it is not necessary to recertify using D6216–12.

* * * * *

13.0 What Specifications Does a COMS Have to Meet for Certification?

A COMS must meet the following design, manufacturer's performance, and field audit performance specifications:

Note: If the initial certification of the opacity monitor occurred before November 14, 2018 using D6216–98, D6216–03, or D6216–07, it is not necessary to recertify using D6216–12.A. COMS must meet the following design, manufacturer's performance, and field audit performance specifications.

13.1 Design Specifications. The opacity monitoring equipment must comply with the design specifications of ASTM D6216–12.

13.2 Manufacturer's Performance Specifications. The opacity monitor must comply with the manufacturer's performance specifications of ASTM D6216–12.

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16.0 * * *

8. ASTM D6216–12: Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications. ASTM. October 2012.

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Performance Specification 2—Specifications and Test Procedures for SO_2 and NO_X Continuous Emission Monitoring Systems in Stationary Sources

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13.2 Relative Accuracy Performance Specification.

	Calculate . . .	RA criteria (%)
If average emissions during the RATA are ≥50% of emission standard.	Use Eq. 2–6, with RM in the denominator	≤20.0
If average emissions during the RATA are <50% of emission standard.	Use Eq. 2–6, emission standard in the denominator	≤10.0
For SO_2 emission standards ≤130 but ≥86 ng/J (0.30 and 0.20 lb/million Btu).	Use Eq. 2–6, emission standard in the denominator	≤15.0
For SO_2 emission standards <86 ng/J (0.20 lb/million Btu)	Use Eq. 2–6, emission standard in the denominator	≤20.0

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Performance Specification 3—Specifications and Test Procedures for O_2 and CO_2 Continuous Emission Monitoring Systems in Stationary Sources

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12.0 Calculations and Data Analysis

Calculate the RA using equations 3–1 and 3–2. Summarize the results on a data sheet similar to that shown in Figure 2.2 of PS2.

$$RA = \frac{\left[\left|\bar{d}\right| + \left|CC\right|\right]}{\overline{RM}} \times 100 \qquad \text{Eq. 3-1}$$

Where:

$\left|\bar{d}\right|$ = Absolute value of the mean of the differences (from Equation 2-3 of Performance Specification 2).

|CC| = Absolute value of the confidence coefficient (from Equation 2-5 of Performance Specification 2).

$\overline{RM}$ = Average Reference Method Value

$$RA = \left|\overline{RM} - \overline{CEMS}\right| \qquad \text{Eq. } 3-2$$

$\overline{RM}$ = Average Reference Method Value

$\overline{CEMS}$ = Average CEMS Value

* * * * *

13.2 CEMS Relative Accuracy Performance Specification. The RA of the CEMS must be no greater than 20.0 percent of the mean value of the reference method (RM) data when calculated using equation 3–1. The results are also acceptable if the result of Equation 3–2 is less than or equal to 1.0 percent O_2 (or CO_2).

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Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources

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13.1 What is the 7-day drift check performance specification? Your daily PM CEMS internal drift checks must demonstrate that the daily drift of your PM CEMS does not deviate from the value of the reference light, optical filter, Beta attenuation signal, or other technology-suitable reference standard by more than 2 percent of the response range. If your CEMS includes diluent and/or auxiliary monitors (for temperature, pressure, and/or moisture) that are employed as a necessary part of this performance specification, you must determine the calibration drift separately for each ancillary monitor in terms of its respective output (see the appropriate performance specification for the diluent CEMS specification). None of the calibration drifts may exceed their individual specification.

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Performance Specification 15—Performance Specification for Extractive FTIR Continuous Emissions Monitor Systems in Stationary Sources

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13.0 Method Performance [Reserved]

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Performance Specification 18—Performance Specifications and Test Procedures for Gaseous Hydrogen Chloride (HCl) Continuous Emission Monitoring Systems at Stationary Sources

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11.8.7 The zero-level and mid-level CD for each day must be less than 5.0 percent of the span value as specified in section 13.2 of this PS. You must meet this criterion for 7 consecutive operating days.

* * * * *

17.0 * * *

TABLE 1—INTERFERENCE TEST GAS CONCENTRATIONS

Potential interferent gas [1]	Approximate concentration (balance N_2)
CO_2	15% ± 1% CO_2.[2]
CO	100 ± 20 ppm.
CH_2O	20 ± 5 ppm.
CH_4	100 ± 20 ppm.
NH_3	10 ± 5 ppm (extractive CEMS only).
NO	250 ± 50 ppm.
SO_2	200 ± 20 ppm.
O_2	3% ± 1% O_2.[2]
H_2O	10% ± 1% H_2O.[2]
N_2	Balance.[2]

[1] Any of these specific gases can be tested at a lower level if the manufacturer has provided reliable means for limiting or scrubbing that gas to a specified level in CEMS field installations.

[2] Gases for short path IP cell interference tests cannot be added above 100 percent stack equivalent concentration. Add these gases at the indicated percentages to make up the remaining cell volume.

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PS–18 Appendix A Standard Addition Procedures

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12.0 [Reserved]

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■ 12. Revise sections 5.1.2(1) and (3) in Procedure 1 of appendix F to part 60 to read as follows:

Appendix F to Part 60—Quality Assurance Procedures

Procedure 1—Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used For Compliance Determination

* * * * *

5.1.2 * * *

(1) Challenge the CEMS (both pollutant and diluent portions of the CEMS, if applicable) with an audit gas of known concentration at two points within the following ranges:

Audit point	Audit range		
	Pollutant monitors	Diluent monitors for—	
		CO_2	O_2
1	20 to 30% of span value	5 to 8% by volume	4 to 6% by volume.
2	50 to 60% of span value	10 to 14% by volume	8 to 12% by volume.

Introduce each of the audit gases, three times each for a total of six challenges. Introduce the gases in such a manner that the entire CEMS is challenged. Do not introduce the same gas concentration twice in succession.

Use of separate audit gas cylinder for audit points 1 and 2. Do not dilute gas from audit cylinder when challenging the CEMS.

The monitor should be challenged at each audit point for a sufficient period of time to assure adsorption-desorption of the CEMS sample transport surfaces has stabilized.

* * * * *

(3) Use Certified Reference Materials (CRM's) (See Citation 1) audit gases that have been certified by comparison to National Institute of Standards and Technology (NIST) Standard Reference Materials (SRM's) or EPA Protocol Gases following the most recent edition of the EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (See Citation 2). Procedures for preparation of CRM's are described in Citation 1. Procedures for preparation of EPA Protocol Gases are described in Citation 2. In the case that a suitable audit gas level is not commercially available, Method 205 (See Citation 3) may be used to dilute CRM's or EPA Protocol Gases to the needed level. The difference between the actual concentration of the audit gas and the concentration indicated by the monitor is used to assess the accuracy of the CEMS.

* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 13. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 14. In § 63.7, revise paragraphs (g)(2) introductory text and (g)(2)(v) to read as follows:

§ 63.7 Performance testing requirements.

* * * * *

(g) * * *

(2) Contents of a performance test, CMS performance evaluation, or CMS quality assurance test report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard, test method, CMS performance specification, or quality assurance requirement for a CMS, or as otherwise approved by the Administrator in writing, the report shall include the elements identified in paragraphs (g)(2)(i) through (vi) of this section.

* * * * *

(v) Where a test method, CEMS, PEMS, or COMS performance specification, or on-going quality assurance requirement for a CEMS, PEMS, or COMS requires you record or report, the following shall be included in your report: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

* * * * *

■ 15. In § 63.8, revise paragraph (e)(5)(i) to read as follows:

§ 63.8 Monitoring requirements.

* * * * *

(e) * * *

(5) * * * (i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation containing the information specified in § 63.7(g)(2)(i) through (vi) simultaneously with the results of the performance test required under § 63.7 or within 60 days of completion of the performance evaluation, unless otherwise specified in a relevant standard.

* * * * *

■ 16. Revise Table 6 to Subpart DDDDD of part 63 to read as follows:

Table 6 to Subpart DDDDD of Part 63—Fuel Analysis Requirements

As stated in § 63.7521, you must comply with the following requirements

for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods (as defined in § 63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
1. Mercury	a. Collect fuel samples	Procedure in § 63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a] (for coal) or EPA 1631 or EPA 1631E or ASTM D6323[a] (for solid), or EPA 821–R–01–013 (for liquid or solid), or ASTM D4177[a] (for liquid), or ASTM D4057[a] (for liquid), or equivalent.
	b. Composite fuel samples	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW–846–3050B[a] (for solid samples), ASTM D2013/D2013M[a] (for coal), ASTM D5198[a] (for biomass), or EPA 3050[a] (for solid fuel), or EPA 821–R–01–013[a] (for liquid or solid), or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), or ASTM D5864[a] for liquids and other solids, or ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173[a], ASTM E871[a], or ASTM D5864[a], or ASTM D240[a], or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or equivalent.
	f. Measure mercury concentration in fuel sample.	ASTM D6722[a] (for coal), EPA SW–846–7471B[a] or EPA 1631 or EPA 1631E[a] (for solid samples), or EPA SW–846–7470A[a] or EPA SW–846–7471B[a] (for liquid samples), or EPA 821–R–01–013[a] (for liquid or solid), or equivalent.
	g. Convert concentration into units of pounds of mercury per MMBtu of heat content.	For fuel mixtures use Equation 8 in § 63.7530.
2. HCl	a. Collect fuel samples	Procedure in § 63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a] (for coal) or ASTM D6323[a] (for coal or biomass), ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels), or equivalent.
	b. Composite fuel samples	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW–846–3050B[a] (for solid samples), ASTM D2013/D2013M[a] (for coal), or ASTM D5198[a] (for biomass), or EPA 3050[a] or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), ASTM D5864[a], ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173[a] or ASTM E871[a], or D5864[a], or ASTM D240[a], or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or equivalent.
	f. Measure chlorine concentration in fuel sample.	EPA SW–846–9250[a], ASTM D6721[a], ASTM D4208[a] (for coal), or EPA SW–846–5050[a] or ASTM E776[a] (for solid fuel), or EPA SW–846–9056[a] or SW–846–9076[a] (for solids or liquids) or equivalent.
	g. Convert concentrations into units of pounds of HCl per MMBtu of heat content.	For fuel mixtures use Equation 7 in § 63.7530 and convert from chlorine to HCl by multiplying by 1.028.
3. Mercury Fuel Specification for other gas 1 fuels.	a. Measure mercury concentration in the fuel sample and convert to units of micrograms per cubic meter, or.	Method 30B (M30B) at 40 CFR part 60, appendix A–8 of this chapter or ASTM D5954[a], ASTM D6350[a], ISO 6978–1:2003(E)[a], or ISO 6978–2:2003(E)[a], or EPA–1631[a] or equivalent.
	b. Measure mercury concentration in the exhaust gas when firing only the other gas 1 fuel is fired in the boiler or process heater.	Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A–8 of this chapter or Method 101A or Method 102 at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784[a] or equivalent.
4. TSM	a. Collect fuel samples	Procedure in § 63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a] (for coal) or ASTM D6323[a] (for coal or biomass), or ASTM D4177[a], (for liquid fuels), or ASTM D4057[a] (for liquid fuels), or equivalent.
	b. Composite fuel samples	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW–846–3050B[a] (for solid samples), ASTM D2013/D2013M[a] (for coal), ASTM D5198[a] or TAPPI T266[a] (for biomass), or EPA 3050[a] or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), or ASTM D5864[a] for liquids and other solids, or ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173[a] or ASTM E871[a], or D5864[a], or ASTM D240[a], or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels), or equivalent.
	f. Measure TSM concentration in fuel sample.	ASTM D3683[a], or ASTM D4606[a], or ASTM D6357[a] or EPA 200.8[a] or EPA SW–846–6020[a], or EPA SW–846–6020A[a], or EPA SW–846–6010C[a], EPA 7060[a] or EPA 7060A[a] (for arsenic only), or EPA SW–846–7740[a] (for selenium only).

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
	g. Convert concentrations into units of pounds of TSM per MMBtu of heat content.	For fuel mixtures use Equation 9 in § 63.7530.

[a] Incorporated by reference, see § 63.14.

* * * * *

■ 17. Revise Table 5 to Subpart UUUUU of part 63 to read as follows:

Table 5 to Subpart UUUUU of Part 63—Performance Testing Requirements

As stated in § 63.10007, you must comply with the following requirements for performance testing for existing, new or reconstructed affected sources: [1]

To conduct a performance test for the following pollutant . . .	Using . . .	You must perform the following activities, as applicable to your input- or output-based emission limit . . .	Using . . .[2]
1. Filterable Particulate matter (PM).	Emissions Testing ...	a. Select sampling ports location and the number of traverse points.	Method 1 at appendix A–1 to part 60 of this chapter.
		b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2A, 2C, 2F, 2G or 2H at appendix A–1 or A–2 to part 60 of this chapter.
		c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B at appendix A–2 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981.[3]
		d. Measure the moisture content of the stack gas.	Method 4 at appendix A–3 to part 60 of this chapter.
		e. Measure the filterable PM concentration	Methods 5 and 5I at appendix A–3 to part 60 of this chapter. For positive pressure fabric filters, Method 5D at appendix A–3 to part 60 of this chapter for filterable PM emissions. Note that the Method 5 or 5I front half temperature shall be 160° ±14 °C (320° ±25 °F).
		f. Convert emissions concentration to lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
	OR	OR	
	PM CEMS	a. Install, certify, operate, and maintain the PM CEMS.	Performance Specification 11 at appendix B to part 60 of this chapter and Procedure 2 at appendix F to part 60 of this chapter.
		b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems.	Part 75 of this chapter and § 63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
2. Total or individual non-Hg HAP metals.	Emissions Testing ...	a. Select sampling ports location and the number of traverse points.	Method 1 at appendix A–1 to part 60 of this chapter.
		b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2A, 2C, 2F, 2G or 2H at appendix A–1 or A–2 to part 60 of this chapter.
		c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B at appendix A–2 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981.[3]
		d. Measure the moisture content of the stack gas.	Method 4 at appendix A–3 to part 60 of this chapter.

[1] Regarding emissions data collected during periods of startup or shutdown, see §§ 63.10020(b) and (c) and 63.10021(h).

To conduct a performance test for the following pollutant . . .	Using . . .	You must perform the following activities, as applicable to your input- or output-based emission limit . . .	Using . . .[2]
		e. Measure the HAP metals emissions concentrations and determine each individual HAP metals emissions concentration, as well as the total filterable HAP metals emissions concentration and total HAP metals emissions concentration.	Method 29 at appendix A–8 to part 60 of this chapter. For liquid oil-fired units, Hg is included in HAP metals and you may use Method 29, Method 30B at appendix A–8 to part 60 of this chapter; for Method 29, you must report the front half and back half results separately. When using Method 29, report metals matrix spike and recovery levels.
		f. Convert emissions concentrations (individual HAP metals, total filterable HAP metals, and total HAP metals) to lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
3. Hydrogen chloride (HCl) and hydrogen fluoride (HF).	Emissions Testing ...	a. Select sampling ports location and the number of traverse points.	Method 1 at appendix A–1 to part 60 of this chapter.
		b. Determine velocity and volumetric flowrate of the stack gas.	Method 2, 2A, 2C, 2F, 2G or 2H at appendix A–1 or A–2 to part 60 of this chapter.
		c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B at appendix A–2 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981.[3]
		d. Measure the moisture content of the stack gas.	Method 4 at appendix A–3 to part 60 of this chapter.
		e. Measure the HCl and HF emissions concentrations.	Method 26 or Method 26A at appendix A–8 to part 60 of this chapter or Method 320 at appendix A to part 63 of this chapter or ASTM D6348–03[3] with (1) the following conditions when using ASTM D6348–03: (A) The test plan preparation and implementation in the Annexes to ASTM D6348–03, Sections A1 through A8 are mandatory; (B) For ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (see Equation A5.5); (C) For the ASTM D6348–03 test data to be acceptable for a target analyte, %R must be 70% ≥R ≤130%; and

3.e.1(D) The %R value for each compound must be reported in the test report and all field measurements corrected with the calculated %R value for that compound using the following equation:

$$\text{Reported Result} = \frac{(\text{Measured Concentration in Stack})}{\%R} \, x \, 100$$

and

To conduct a performance test for the following pollutant . . . (cont'd)	Using . . . (cont'd)	You must perform the following activities, as applicable to your input- or output-based emission limit . . . (cont'd)	Using . . .[2] (cont'd)
			(2) spiking levels nominally no greater than two times the level corresponding to the applicable emission limit. Method 26A must be used if there are entrained water droplets in the exhaust stream.

To conduct a performance test for the following pollutant . . . (cont'd)	Using . . . (cont'd)	You must perform the following activities, as applicable to your input- or output-based emission limit . . . (cont'd)	Using . . .[2] (cont'd)
		f. Convert emissions concentration to lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
	OR	OR	
	HCl and/or HF CEMS.	a. Install, certify, operate, and maintain the HCl or HF CEMS.	Appendix B of this subpart.
		b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems.	Part 75 of this chapter and § 63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
4. Mercury (Hg)	Emissions Testing	a. Select sampling ports location and the number of traverse points.	Method 1 at appendix A–1 to part 60 of this chapter or Method 30B at Appendix A–8 for Method 30B point selection.
		b. Determine velocity and volumetric flowrate of the stack gas.	Method 2, 2A, 2C, 2F, 2G or 2H at appendix A–1 or A–2 to part 60 of this chapter.
		c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B at appendix A–1 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981.[3]
		d. Measure the moisture content of the stack gas.	Method 4 at appendix A–3 to part 60 of this chapter.
		e. Measure the Hg emission concentration	Method 30B at appendix A–8 to part 60 of this chapter, ASTM D6784,[3] or Method 29 at appendix A–8 to part 60 of this chapter; for Method 29, you must report the front half and back half results separately.
		f. Convert emissions concentration to lb/TBtu or lb/GWh emission rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
	OR	OR	
	Hg CEMS	a. Install, certify, operate, and maintain the CEMS.	Sections 3.2.1 and 5.1 of appendix A of this subpart.
		b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems.	Part 75 of this chapter and § 63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/TBtu or lb/GWh emissions rates.	Section 6 of appendix A to this subpart.
	OR	OR	
	Sorbent trap monitoring system.	a. Install, certify, operate, and maintain the sorbent trap monitoring system.	Sections 3.2.2 and 5.2 of appendix A to this subpart.
		b. Install, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems.	Part 75 of this chapter and § 63.10010(a), (b), (c), and (d).
		c. Convert emissions concentrations to 30 boiler operating day rolling average lb/TBtu or lb/GWh emissions rates.	Section 6 of appendix A to this subpart.
	OR	OR	
	LEE testing	a. Select sampling ports location and the number of traverse points.	Single point located at the 10% centroidal area of the duct at a port location per Method 1 at appendix A–1 to part 60 of this chapter or Method 30B at Appendix A–8 for Method 30B point selection.
		b. Determine velocity and volumetric flowrate of the stack gas.	Method 2, 2A, 2C, 2F, 2G, or 2H at appendix A–1 or A–2 to part 60 of this chapter or flow monitoring system certified per appendix A of this subpart.
		c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B at appendix A–1 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981,[3] or diluent gas monitoring systems certified according to part 75 of this chapter.

To conduct a performance test for the following pollutant . . . (cont'd)	Using . . . (cont'd)	You must perform the following activities, as applicable to your input- or output-based emission limit . . . (cont'd)	Using . . .[2] (cont'd)
		d. Measure the moisture content of the stack gas.	Method 4 at appendix A–3 to part 60 of this chapter, or moisture monitoring systems certified according to part 75 of this chapter.
		e. Measure the Hg emission concentration	Method 30B at appendix A–8 to part 60 of this chapter; perform a 30 operating day test, with a maximum of 10 operating days per run (*i.e.,* per pair of sorbent traps) or sorbent trap monitoring system or Hg CEMS certified per appendix A of this subpart.
		f. Convert emissions concentrations from the LEE test to lb/TBtu or lb/GWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).
		g. Convert average lb/TBtu or lb/GWh Hg emission rate to lb/year, if you are attempting to meet the 29.0 lb/year threshold.	Potential maximum annual heat input in TBtu or potential maximum electricity generated in GWh.
5. Sulfur dioxide (SO_2)	SO_2 CEMS	a. Install, certify, operate, and maintain the CEMS.	Part 75 of this chapter and § 63.10010(a) and (f).
		b. Install, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems.	Part 75 of this chapter and § 63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/MMBtu or lb/MWh emissions rates.	Method 19 F-factor methodology at appendix A–7 to part 60 of this chapter, or calculate using mass emissions rate and gross output data (see § 63.10007(e)).

■ 18. In appendix A to Part 63:

■ a. Revise section 12.4 in Method 303.

■ b. Revise section 2.0 in Method 308.

■ c. Remove and reserve section 7.2.2 in Method 308.

■ d. Revise sections 7.2.3.3, 8.1.2, 9.1, 11.3.2, and 12.1 in Method 308.

■ e. Add sections 12.5 and 13.0 in Method 308.

■ f. Revise sections 8.2.2.4 and 9.2.3 in Method 320.

■ g. Revise section 12.9 in Method 323.

■ h. Revise section 8.2.1.3, Figure 8.1. and section 8.2.3.2 in Method 325A.

■ i. Add sections 8.2.3.3 and 8.4.3 in Method 325A.

■ j. Revise sections 9.3.2, 9.13, 11.3.2.5, and 12.2.2 in Method 325B.

■ k. Remove sections 12.2.3 and 12.2.4 in Method 325B.

■ l. Revise table 17.1 in Method 325B.

The revisions and additions read as follows:

Appendix A to Part 63—Test Methods

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Method 303—Determination of Visible Emissions From By-Product Coke Oven Batteries

* * * * *

12.4 Average Duration of VE from Charging Operations. Use Equation 303–3 to calculate the daily 30-day rolling log average of seconds of visible emissions from the charging operation for each battery using these current day's observations and the 29 previous valid daily sets of observations.

$$\text{logarithmic average} = e^{y} - 1 \qquad \text{(Eq. 303-3)}$$

$$\text{where } y = \frac{\ln(X_1 + 1) + \ln(X_2 + 1) + \ldots \ln(X_i + 1)}{A}$$

* * * * *

Method 308—Procedure for Determination of Methanol Emission From Stationary Sources

* * * * *

2.0 Summary of Method

A gas sample is extracted from the sampling point in the stack. The methanol is collected in deionized distilled water and adsorbed on silica gel. The sample is returned to the laboratory where the methanol in the water fraction is separated from other organic compounds with a gas chromatograph (GC) and is then measured by a flame ionization detector (FID). The fraction adsorbed on silica gel is extracted with deionized distilled water and is then separated and measured by GC/FID.

* * * * *

7.2.2 [Reserved]

* * * * *

7.2.3.3 Methanol Standards for Adsorbent Tube Samples. Prepare a series of methanol standards by first pipetting 10 ml of the methanol working standard into a 100-ml volumetric flask and diluting the contents to exactly 100 ml with deionized distilled water. This standard will contain 10 µg/ml of methanol. Pipette 5, 15, and 25 ml of this

[2] See Tables 1 and 2 to this subpart for required sample volumes and/or sampling run times.

[3] Incorporated by reference, see § 63.14.

standard, respectively, into three 50-ml volumetric flasks. Dilute each solution to 50 ml with deionized distilled water. These standards will have 1, 3, and 5 µg/ml of methanol, respectively. Transfer all four standards into 40-ml glass vials capped with Teflon®-lined septa and store under refrigeration. Discard any excess solution.

* * * * *

8.1.2 Leak Check. A leak check before and after the sampling run is mandatory. The leak-check procedure is as follows:

Temporarily attach a suitable (*e.g.,* 0- to 40-ml/min) rotameter to the outlet of the DGM, and place a vacuum gauge at or near the probe inlet. Plug the probe inlet, pull a vacuum of at least 250 mm (10 inch) Hg or the highest vacuum experienced during the sampling run, and note the flow rate as indicated by the rotameter. A leakage rate in excess of 2 percent of the average sampling rate is acceptable.

Note: Carefully release the probe inlet plug before turning off the pump.

* * * * *

9.1 Miscellaneous Quality Control Measures. The following quality control measures are required:

Section	Quality control measure	Effect
8.1.2, 8.1.3, 10.1	Sampling equipment leak check and calibration	Ensures accurate measurement of sample volume.
10.2	GC calibration	Ensures precision of GC analysis.
13.0	Methanol spike recovery check	Verifies all methanol in stack gas is being captured in impinge/adsorbent tube setup.

* * * * *

11.3.2 Desorption of Samples. Add 3 ml of deionized distilled water to each of the stoppered vials and shake or vibrate the vials for 30 minutes.

* * * * *

12.1 Nomenclature.

C_{af} = Concentration of methanol in the front of the adsorbent tube, µg/ml.

C_{ab} = Concentration of methanol in the back of the adsorbent tube, µg/ml.

C_i = Concentration of methanol in the impinger portion of the sample train, µg/ml.

E = Mass emission rate of methanol, µg/hr (lb/hr).

m_s = Total mass of compound measured in impinger and on adsorbent with spiked train (mg).

m_u = Total mass of compound measured in impinger and on adsorbent with unspiked train (mg).

m_v = Mass per volume of spiked compound measured (mg/L).

M_{tot} = Total mass of methanol collected in the sample train, µg.

P_{bar} = Barometric pressure at the exit orifice of the DGM, mm Hg (in. Hg).

P_{std} = Standard absolute pressure, 760 mm Hg (29.92 in. Hg).

Q_{std} = Dry volumetric stack gas flow rate corrected to standard conditions, dscm/hr (dscf/hr).

R = fraction of spiked compound recovered

s = theoretical concentration (ppm) of spiked target compound

T_m = Average DGM absolute temperature, degrees K (°R).

T_{std} = Standard absolute temperature, 293 degrees K (528 °R).

V_{af} = Volume of front half adsorbent sample, ml.

V_{ab} = Volume of back half adsorbent sample, ml.

V_i = Volume of impinger sample, ml.

V_m = Dry gas volume as measured by the DGM, dry cubic meters (dcm), dry cubic feet (dcf).

$V_{m(std)}$ = Dry gas volume measured by the DGM, corrected to standard conditions, dry standard cubic meters (dscm), dry standard cubic feet (dscf).

* * * * *

12.5 Recovery Fraction (R)

$$m_v = \frac{m_s}{V_s} - \frac{m_u}{V_u} \qquad \text{Equation 308-4}$$

$$R = \frac{m_v \, x \, v_s}{s} \qquad \text{Equation 308-5}$$

13.0 Method Performance

Since a potential sample may contain a variety of compounds from various sources, a specific precision limit for the analysis of field samples is impractical. Precision in the range of 5 to 10 percent relative standard deviation (RSD) is typical for gas chromatographic techniques, but an experienced GC operator with a reliable instrument can readily achieve 5 percent RSD. For this method, the following combined GC/operator values are required.

(a) Precision. Calibration standards must meet the requirements in section 10.2.1 or 10.2.2 as applicable.

(b) Recovery. After developing an appropriate sampling and analytical system for the pollutants of interest, conduct the following spike recovery procedure at each sampling point where the method is being applied.

i. Methanol Spike. Set up two identical sampling trains. Collocate the two sampling probes in the stack. The probes shall be placed in the same horizontal plane, where the first probe tip is 2.5 cm from the outside edge of the other. One of the sampling trains shall be designated the spiked train and the other the unspiked train. Spike methanol into the impinger, and onto the adsorbent tube in the spiked train prior to sampling. The total mass of methanol shall be 40 to 60 percent of the mass expected to be collected with the unspiked train. Sample the stack gas into the two trains simultaneously. Analyze the impingers and adsorbents from the two trains utilizing identical analytical procedures and instrumentation. Determine the fraction of spiked methanol recovered (R) by combining the amount recovered in the impinger and in the adsorbent tube, using the equations in section 12.5. Recovery values must fall in the range: $0.70 \leq R \leq 1.30$. Report the R value in the test report.

ii. [Reserved]

* * * * *

Method 320—Measurement of Vapor Phase Organic and Inorganic Emissions By Extractive Fourier Transform Infrared (FTIR) Spectroscopy

* * * * *

8.2.2.4 Determine the percent leak volume $\%V_L$ for the signal integration time t_{SS} and for ΔP_{max}, *i.e.,* the larger of ΔP_v or ΔP_p, as follows:

$$\%V_L = 50 t_{ss} \frac{\Delta P_{max}}{P_s} \qquad (2)$$

Where:

50 = 100% divided by the leak-check time of 2 minutes.

* * * * *

9.2.3 Calculate the dilution ratio using the tracer gas as follows:

$$DF = \frac{SF_{6(spk)}}{SF_{6(dir)}} \quad (3)$$

Where:

$$CS = DF * Spike_{dir} + Unspike\ (1 - DF) \quad (4)$$

DF = Dilution factor of the spike gas; this value shall be ≥10.

$SF_{6(dir)}$ = SF_6 (or tracer gas) concentration measured directly in undiluted spike gas.

$SF_{6(spk)}$ = Diluted SF_6 (or tracer gas) concentration measured in a spiked sample.

$Spike_{dir}$ = Concentration of the analyte in the spike standard measured by filling the FTIR cell directly.

CS = Expected concentration of the spiked samples.

Unspike = Native concentration of analytes in unspiked samples.

* * * * *

Method 323—Measurment of Formaldehyde Emissions From Natural Gas-Fired Stationary Sources-Acetyl Acetone Derivitization Method

* * * * *

12.9 Formaldehyde Concentration Corrected to 15% Oxygen

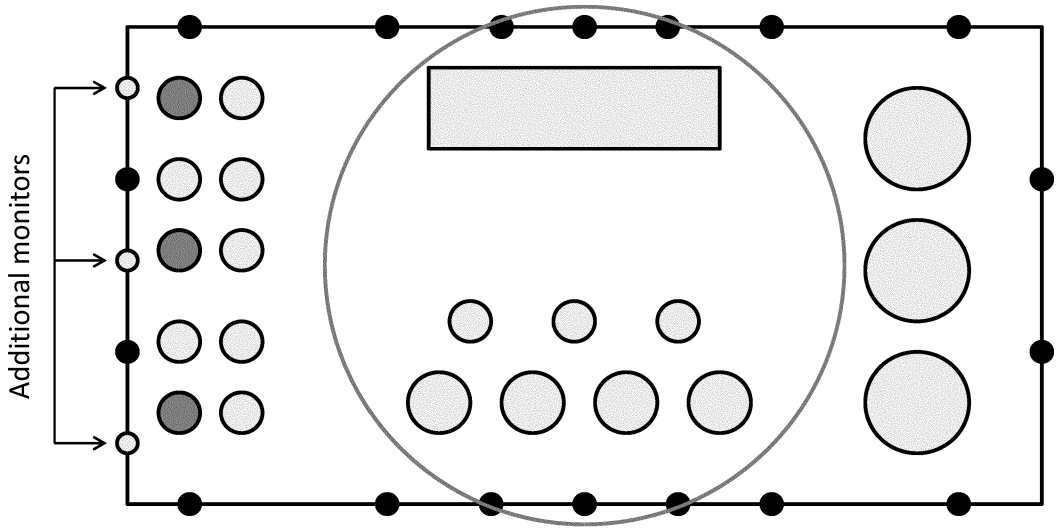
* * * * *

$$C_{form@15\%O_2} = C_{form}\ \frac{(20.9-15)}{(20.9-O_{2d})} \quad \text{Eq. 323-8}$$

Method 325A—Volatile Organic Compounds From Fugitive and Area Sources: Sampler Deployment and VOC Sample Collection

* * * * *

8.2.1.3 An extra sampler must be placed near known sources of VOCs if potential emission sources are within 50 meters (162 feet) of the boundary and the source or sources are located between two monitors. Measure the distance (x) between the two monitors and place another monitor approximately halfway between (x/2 ±10 percent) the two monitors. Only one extra sampler is required between two monitors to account for known sources of VOCs. For example, in Figure 8.1, the facility added three additional monitors (*i.e.,* light shaded sampler locations), and in Figure 8.2, the facility added two additional monitors to provide sufficient coverage of all area sources.



Refinery (20° Angle)

Note: Shaded sources are within 50 meters of the property boundary and are located between two monitors. Additional coverage required by this method was accomplished by placing the monitors halfway between two existing monitors.

Figure 8.1. Facility with a Regular Shape Between 750 and 1,500 Acres in Area

* * * * *

8.2.3.2 For facilities with a monitoring perimeter length greater than or equal to 7,315 meters (24,000 feet), sampling locations are spaced 610 ± 76 meters (2,000 ± 250 feet) apart.

8.2.3.3 Unless otherwise specified in an applicable regulation, permit or other requirement, for small disconnected subareas with known sources within 50 meters (162 feet) of the monitoring perimeter, sampling points need not be placed closer than 152 meters (500 feet) apart as long as a minimum of 3 monitoring locations are used for each subarea.

* * * * *

8.4.3 When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (*e.g.,* extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible.

* * * * *

Method 325B—Volatile Organic Compounds From Fugitive and Area Sources: Sampler Preparation and Analysis

* * * * *

9.3.2 Field blanks must be shipped to the monitoring site with the sampling tubes and must be stored at the sampling location throughout the monitoring exercise. The field blanks must be installed under a protective hood/cover at the sampling location, but the long-term storage caps must remain in place throughout the monitoring period (see Method 325A). The field blanks are then shipped back to the laboratory in the same container as the sampled tubes. Collect at least two field blank samples per sampling period to ensure sample integrity associated with shipment, collection, and storage.

* * * * *

9.13 Routine CCV at the Start of a Sequence. Run CCV before each sequence of analyses and after every tenth sample to ensure that the previous multi-level calibration (see section 10.0) is still valid.

* * * * *

11.3.2.5 Whenever the thermal desorption—GC/MS analytical method is changed or major equipment maintenance is performed, you must conduct a new five-level calibration (see section 10.0). System calibration remains valid as long as results from subsequent CCV are within 30 percent of the most recent 5-point calibration (see section 9.13). Include relevant CCV data in the supporting information in the data report for each set of samples.

* * * * *

12.2.2 Determine the equivalent concentrations of compounds in atmospheres as follows. Correct target compound concentrations determined at the sampling site temperature and atmospheric pressure to standard conditions (25 °C and 760 mm mercury) using Equation 12.5.

$$C_c = \frac{(m_{meas}) * 10^6}{U_{NTP} * \left[\frac{t_{ss}}{298.15}\right]^{\frac{1}{2}} * t} \qquad \text{Eq. 12.5}$$

Where:

m_{meas} = The mass of the compound as measured in the sorbent tube (µg).

t = The exposure time (minutes).

t_{ss} = The average temperature during the collection period at the sampling site (K).

U_{NTP} = The method defined diffusive uptake rate (sampling rate) (mL/min).

Note: Diffusive uptake rates (U_{NTP}) for common VOCs, using carbon sorbents packed into sorbent tubes of the dimensions specified in section 6.1, are listed in Table 12.1. Adjust analytical conditions to keep expected sampled masses within range (see sections 11.3.1.3 to 11.3.1.5). Best possible method detection limits are typically in the order of 0.1 ppb for 1,3-butadiene and 0.05 ppb for volatile aromatics such as benzene for 14-day monitoring. However, actual detection limits will depend upon the analytical conditions selected.

* * * * *

TABLE 17.1—SUMMARY OF GC/MS ANALYSIS QUALITY CONTROL PROCEDURES

Parameter	Frequency	Acceptance criteria	Corrective action
Bromofluorobenzene Instrument Tune Performance Check.	Daily [a] prior to sample analysis	Evaluation criteria presented in Section 9.5 and Table 9.2.	(1) Retune and or (2) Perform Maintenance.
Five point calibration bracketing the expected sample concentration.	Following any major change, repair or maintenance or if daily CCV does not meet method requirements. Recalibration not to exceed three months.	(1) Percent Deviation (%DEV) of response factors ±30%. (2) Relative Retention Times (RRTs) for target peaks ±0.06 units from mean RRT.	(1) Repeat calibration sample analysis. (2) Repeat linearity check. (3) Prepare new calibration standards as necessary and repeat analysis.
Calibration Verification (CCV Second source calibration verification check).	Following the calibration curve	The response factor ±30% DEV from calibration curve average response factor.	(1) Repeat calibration check. (2) Repeat calibration curve.
Laboratory Blank Analysis	Daily [a] following bromofluoro benzene and calibration check; prior to sample analysis.	(1) ≤0.2 ppbv per analyte or ≤3 times the LOD, whichever is greater. (2) Internal Standard (IS) area response ±40% and IS Retention Time (RT) ±0.33 min. of most recent calibration check.	(1) Repeat analysis with new blank tube. (2) Check system for leaks, contamination. (3) Analyze additional blank.
Blank Sorbent Tube Certification ...	One tube analyzed for each batch of tubes cleaned or 10 percent of tubes whichever is greater.	<0.2 ppbv per VOC targeted compound or 3 times the LOD, whichever is greater.	Re-clean all tubes in batch and reanalyze.
Samples—Internal Standards	All samples	IS area response ±40% and IS RT ±0.33 min. of most recent calibration validation.	Flag Data for possible invalidation.

TABLE 17.1—SUMMARY OF GC/MS ANALYSIS QUALITY CONTROL PROCEDURES—Continued

Parameter	Frequency	Acceptance criteria	Corrective action
Field Blanks	Two per sampling period	No greater than one-third of the measured target analyte or compliance limit.	Flag Data for possible invalidation due to high blank bias.

[a] Every 24 hours.

* * * * *

[FR Doc. 2018–24747 Filed 11–13–18; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2018–0222; FRL–9986–31–Region 9]

Approval of Arizona Air Plan; Hayden Lead Nonattainment Area Plan for the 2008 Lead Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving a state implementation plan (SIP) revision submitted by the State of Arizona to meet Clean Air Act (CAA or ''Act'') requirements applicable to the Hayden lead nonattainment area (''Hayden Lead NAA''). The EPA is approving the base year emissions inventory, the attainment demonstration, the control strategy, including reasonably available control technology and reasonably available control measures demonstrations, the reasonable further progress demonstration, and the contingency measure as meeting the requirements of the CAA and the EPA's implementing regulations for the 2008 lead national ambient air quality standard (NAAQS). We also find that the State has demonstrated that the Arizona SIP meets the new source review (NSR) requirements of CAA section 172(c)(5) for the Hayden Lead NAA.

DATES: This final rule is effective on December 14, 2018.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–R09–OAR–2018–0222. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available through *https://www.regulations.gov,* or please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information.

FOR FURTHER INFORMATION CONTACT: Ginger Vagenas, EPA Region IX, 415–972–3964, *Vagenas.Ginger@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, the terms ''we,'' ''us,'' and ''our'' mean the EPA.

Table of Contents

I. Background

Lead is generally emitted in the form of particles that are deposited in water, soil, and dust. People may be exposed to lead by inhaling it or by ingesting lead-contaminated food, water, soil, or dust. Once in the body, lead is quickly absorbed into the bloodstream and can result in a broad range of adverse health effects including damage to the central nervous system, cardiovascular function, kidneys, immune system, and red blood cells. Children are particularly vulnerable to lead exposure, in part because they are more likely to ingest lead and in part because their still-developing bodies are more sensitive to the effects of lead. The harmful effects to children's developing nervous systems (including their brains) arising from lead exposure may include IQ[1] loss, poor academic achievement, long-term learning disabilities, and an increased risk of delinquent behavior.

The EPA first established a lead standard in 1978 at 1.5 micrograms per meter cubed (μg/m^3) as a quarterly average.[2] Based on new health and scientific data, the EPA revised the federal lead standard to 0.15 μg/m^3 and revised the averaging time for the standard on October 15, 2008.[3] A violation of the standard occurs when ambient lead concentrations exceed 0.15 μg/m^3 averaged over a 3-month rolling period.

Following the promulgation of a new or revised NAAQS, the EPA is required by the CAA to designate areas throughout the United States as attaining or not attaining the NAAQS. This process is set forth in section 107(d)(1) of the Act. After initially being designated unclassifiable due to insufficient monitoring data, the Hayden area was redesignated nonattainment on September 3, 2014, effective October 3, 2014.[4] [5] The designation of the Hayden area as nonattainment for the 2008 lead NAAQS triggered requirements under section 191(a) of the CAA requiring Arizona to submit a SIP revision with a plan to attain the standard as expeditiously as practicable, but no later than October 3, 2019.

The Arizona Department of Environmental Quality (ADEQ) is the air quality agency that develops SIP revisions for the Hayden area. The SIP revision for the Hayden Lead NAA, entitled ''SIP Revision: Hayden Lead Nonattainment Area'' (''2017 Hayden Lead Plan'' or ''Plan'') was adopted by ADEQ on March 3, 2017, and submitted to the EPA on the same day.[6] The Plan includes a 2012 base year emissions inventory, a demonstration that controls required under the Plan are sufficient to bring the area into attainment of the 2008 lead NAAQS, an analysis that demonstrates reasonably available control measures/reasonably available control technology (RACM/RACT) levels of control are required to be implemented, a demonstration that the Plan provides for reasonable further progress (RFP) towards attainment, and a contingency measure that will be implemented if the area fails to make

[1] IQ (intelligence quotient) is a score created by dividing a person's mental age score, obtained by administering an intelligence test, by the person's chronological age, both expressed in terms of years and months. ''Glossary of Important Assessment and Measurement Terms,'' Philadelphia, PA: National Council on Measurement in Education. 2016.

[2] 43 FR 46246 (October 5, 1978).

[3] 73 FR 66964 (November 12, 2008) (''lead NAAQS rule'').

[4] 79 FR 52205.

[5] For an exact description of the Hayden Lead NAA, see 40 CFR 81.303.

[6] Letter dated March 3, 2017, from Timothy S. Franquist, Director, Air Quality Division, ADEQ, to Alexis Strauss, Acting Regional Administrator, EPA Region IX.

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.T08–1014 to read as follows:

§ 165.T08–1014 Security Zone; Corpus Christi Ship Channel. Corpus Christi, TX.

(a) *Location.* The following area is a security zone:

(1) For LNG GOLAR TUNDRA transiting shoreward of the seaward extremity of the Aransas Pass Jetties in the Corpus Christi Ship Channel and La Quinta Channel, the waters within a 500 yards of LNG GOLAR TUNDRA while transiting until moored.

(2) The mooring basin bound by 27°52′53.38″ N, 097°16′20.66″ W on the northern shoreline; thence to 27°52′45.58″ N, 097°16′19.60″ W; thence to 27°52′38.55″ N, 097°15′45.56″ W; thence to 27°52′49.30″ N, 097°15′45.44″ W; thence west along the shoreline to 27°52′53.38″ N, 097°16′20.66″ W, while LNG GOLAR TUNDRA is moored.

(b) *Effective/enforcement period.* This section is effective without actual notice from November 20, 2018 until November 21, 2018. For the purposes of enforcement, actual notice will be used from November 11, 2018 through November 20, 2018. Enforcement of this section began from the time LNG GOLAR TUNDRA entered the Corpus Christi Ship Channel on November 11, 2018 and will continue until LNG GOLAR TUNDRA's departure on or about November 21, 2018.

(c) *Regulations.* (1) The general regulations in § 165.33 of this part apply. Entry into these zones are prohibited unless authorized by the Captain of the Port Sector Corpus Christi (COTP) or a designated representative. A designated representative is a commissioned, warrant, or petty officer of the U.S. Coast Guard assigned to units under the operational control of USCG Sector Corpus Christi.

(2) Persons or vessels desiring to enter or pass through the zones must request permission from the COTP Sector Corpus Christi on VHF–FM channel 16 or by telephone at 361–939–0450.

(3) If permission is granted, all persons and vessels shall comply with the instructions of the COTP or designated representative.

(d) *Information broadcasts.* The COTP or a designated representative will inform the public through Broadcast Notices to Mariners (BNMs), Local Notices to Mariners (LNMs), and/or Marine Safety Information Bulletins (MSIBs) as appropriate of the enforcement times and date for these security zones.

Dated: November 9, 2018.

J.E. Smith,

Captain, U.S. Coast Guard, Acting Captain of the Port Sector Corpus Christi.

[FR Doc. 2018–25251 Filed 11–19–18; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 60, and 63

[EPA–HQ–OAR–2016–0510; FRL–9986–42–OAR]

RIN 2060–AS95

Revisions to Testing Regulations for Air Emission Sources

Correction

In rule document 2018–24747, appearing on pages 56713 through 56734 in the issue of Wednesday, November 14, 2018 make the following correction:

■ On page 56732, the asterisks directly above Eq. 323–8 were printed in error and those after were omitted. The equation is corrected to appear as set forth below:

Appendix A to Part 63 [Corrected]

Method 323-Measurment of Formaldehyde Emissions From Natural Gas-Fired Stationary Sources-Acetyl Acetone Derivitization Method

* * * * *

$$C_{form@15\%O_2} = C_{form}\ \frac{(20.9-15)}{(20.9-O_{2d})} \qquad \text{Eq. 323-8}$$

* * * * *

[FR Doc. C1–2018–24747 Filed 11–19–18; 8:45 am]

BILLING CODE 1301–00–D

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2017–0460; FRL–9985–98]

Bacillus amyloliquefaciens strain ENV503; Exemption From the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes an exemption from the requirement of a tolerance for residues of *Bacillus amyloliquefaciens* strain ENV503 in or on all food commodities when this pesticide chemical is used in accordance with label directions and good agricultural practices. Envera, LLC submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting an exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of *Bacillus amyloliquefaciens* strain ENV503 in or on all food commodities under FFDCA.

DATES: This regulation is effective November 20, 2018. Objections and requests for hearings must be received on or before January 22, 2019, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2017–0460, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Robert McNally, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *BPPDFRNotices@epa.gov.*

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60 and 63

[EPA–HQ–OAR–2010–0682; FRL–9986–68–OAR]

RIN 2060–AT50

National Emission Standards for Hazardous Air Pollutants and New Source Performance Standards: Petroleum Refinery Sector Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes amendments to the petroleum refinery National Emission Standards for Hazardous Air Pollutants (NESHAP) (referred to as Refinery MACT 1 and Refinery MACT 2) and to the New Source Performance Standards (NSPS) for Petroleum Refineries to clarify the requirements of these rules and to make technical corrections and minor revisions to requirements for work practice standards, recordkeeping, and reporting which were proposed in the **Federal Register** on April 10, 2018. This action also finalizes amendments to the compliance date of the requirements for existing maintenance vents from August 1, 2017, to December 26, 2018, which were proposed in the **Federal Register** on July 10, 2018.

DATES: This final rule is effective on November 26, 2018. The incorporation by reference of certain publications listed in the rule was approved by the Director of the Federal Register as of June 24, 2008.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2010–0682. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Ms. Brenda Shine, Sector Policies and Programs Division (E143–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–3608; fax number: (919) 541–0516; and email address: *shine.brenda@epa.gov*. For information about the applicability of the NESHAP to a particular entity, contact Ms. Maria Malave, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (202) 564–7027; and email address: *malave.maria@epa.gov*.

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here.

AFPM American Fuel and Petrochemical Manufacturers
API American Petroleum Institute
AWP Alternative Work Practice
CAA Clean Air Act
CBI confidential business information
CFR Code of Federal Regulations
CEDRI Compliance and Emissions Data Reporting Interface
CDX Central Data Exchange
CRA Congressional Review Act
CRU catalytic reforming unit
DCU delayed coking unit
EPA Environmental Protection Agency
FCCU fluid catalytic cracking unit
FR Federal Register
HAP hazardous air pollutant(s)
lbs pounds
LEL lower explosive limit
MACT maximum achievable control technology
MPV miscellaneous process vent
NAAQS National Ambient Air Quality Standards
NESHAP National Emission Standards for Hazardous Air Pollutants
NOCS Notice of Compliance Status
NSPS New Source Performance Standard
NTTAA National Technology Transfer and Advancement Act
OEL open-ended line
OSHA Occupational Safety and Health Administration
PM particulate matter
ppb parts per billion
ppm parts per million
PRA Paperwork Reduction Act
PRD pressure relief device
psi pounds per square inch
psia pounds per square inch absolute
RFA Regulatory Flexibility Act
RIN Regulatory Information Number
RSR Refinery Sector Rule
SMR steam-methane reforming
TTN Technology Transfer Network
UMRA Unfunded Mandates Reform Act
VOC volatile organic compounds

Background information. On April 10, 2018, and July 10, 2018, the EPA proposed revisions to the Petroleum Refineries NESHAP and NSPS, (April 2018 Proposal and July 2018 Proposal), respectively (83 FR 15458, April 10, 2018; 83 FR 31939, July 10, 2018). After consideration of the public comments we received on these proposed rules, in this action, we are finalizing revisions to the NESHAP and NSPS rules. We summarize the significant comments we received regarding the April 2018 Proposal and the July 2018 Proposal and provide our responses in this preamble. In addition, a Response to Comments document, which is in the docket for this rulemaking, summarizes and responds to additional comments which were received regarding the April 2018 Proposal. A ''track changes'' version of the regulatory language that incorporates the changes in this action is also available in the docket.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source category	NAICS [1] code
40 CFR part 63, subpart CC Petroleum Refineries	324110

[1] North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: *https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-risk-and-technology-review-and-new-source*. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by January 25, 2019. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

On December 1, 2015, the EPA finalized amendments to the Petroleum Refinery NESHAP in 40 Code of Federal Regulations (CFR) part 63, subparts CC and UUU, referred to as Refinery MACT 1 and 2, respectively, and the NSPS for petroleum refineries in 40 CFR part 60, subparts J and Ja (80 FR 75178) (December 2015 Rule). The final amendments to Refinery MACT 1 include a number of new requirements for ''maintenance vents,'' pressure relief devices (PRDs), delayed coking units (DCUs), and flares, and also establishes a fenceline monitoring requirement.

The December 2015 Rule included revisions to the continuous compliance alternatives for catalytic cracking units and provisions specific to startup and shutdown of catalytic cracking units and sulfur recovery plants. The December 2015 Rule also finalized technical corrections and clarifications to Refinery NSPS subparts J and Ja to address issues raised by the American Petroleum Institute (API) in their 2008 and 2012 petitions for reconsideration of the final NSPS Ja rule that had not been previously addressed. These include corrections and clarifications to provisions for sulfur recovery plants, performance testing, and control device operating parameters.

In the process of implementing these new requirements, numerous questions and issues have been identified and we proposed clarifications and technical amendments to address these questions and issues on April 10, 2018 (April 2018 Proposal) (83 FR 15458; April 10, 2018). These issues were raised in petitions for reconsideration and in separately issued letters from industry and in meetings with industry groups.

The EPA received three separate petitions for reconsideration. Two petitions were jointly filed by API and American Fuel and Petrochemical Manufacturers (AFPM). The first of these petitions was filed on January 19, 2016 and requested an administrative reconsideration under section 307(d)(7)(B) of the CAA of certain provisions of Refinery MACT 1 and 2, as promulgated in the December 2015 Rule. Specifically, API and AFPM requested that the EPA reconsider the maintenance vent provisions in Refinery MACT 1; the alternate startup, shutdown, or hot standby standards for fluid catalytic cracking units (FCCUs) in Refinery MACT 2; the alternate startup and shutdown for sulfur recovery units in Refinery MACT 2; and the new catalytic reforming units (CRUs) purging limitations in Refinery MACT 2. The request pertained to providing and/or clarifying the compliance time for these requirements. Based on this request and additional information received, the EPA issued a proposal on February 9, 2016 (81 FR 6814), and a final rule on July 13, 2016 (81 FR 45232), fully responding to the January 19, 2016, petition for reconsideration. The second petition from API and AFPM was filed on February 1, 2016 and outlined a number of specific issues related to the work practice standards for PRDs and flares, and the alternative water overflow provisions for DCUs, as well as a number of other specific issues on other aspects of the rule. The third petition was filed on February 1, 2016, by Earthjustice on behalf of Air Alliance Houston, California Communities Against Toxics, the Clean Air Council, the Coalition for a Safe Environment, the Community In-Power and Development Association, the Del Amo Action Committee, the Environmental Integrity Project, the Louisiana Bucket Brigade, the Sierra Club, the Texas Environmental Justice Advocacy Services, and Utah Physicians for a Healthy Environment. The Earthjustice petition claimed that several aspects of the revisions to Refinery MACT 1 were

not addressed in the proposed rule, and, thus, the public was precluded from commenting on them during the public comment period, including: (1) Work practice standards for PRDs and flares; (2) alternative water overflow provisions for DCUs; (3) reduced monitoring provisions for fenceline monitoring; and (4) adjustments to the risk assessment to account for these changes from what was proposed. On June 16, 2016, the EPA sent letters to petitioners granting reconsideration on issues where petitioners claimed they had not been provided an opportunity to comment. These petitions and letters granting reconsideration are available for review in the rulemaking docket (see Docket ID Nos. EPA–HQ–OAR–2010–0682–0860, EPA–HQ–OAR–2010–0682–0891 and EPA–HQ–OAR–2010–0682–0892).

On October 18, 2016 (81 FR 71661), the EPA proposed for public comment the issues for which reconsideration was granted in the June 16, 2016, letters. The EPA identified five issues for which it was seeking public comment: (1) The work practice standards for PRDs; (2) the work practice standards for emergency flaring events; (3) the assessment of risk as modified based on implementation of these PRD and emergency flaring work practice standards; (4) the alternative work practice (AWP) standards for DCUs employing the water overflow design; and (5) the provision allowing refineries to reduce the frequency of fenceline monitoring at sampling locations that consistently record benzene concentrations below 0.9 micrograms per cubic meter. In that notice, the EPA also proposed two minor clarifying amendments to correct a cross referencing error and to clarify that facilities complying with overlapping equipment leak provisions must still comply with the PRD work practice standards in the December 2015 Rule.

The February 1, 2016, API and AFPM petition for reconsideration included a number of recommendations for technical amendments and clarifications that were not specifically addressed in the October 18, 2016, proposal.[1] In addition, API and AFPM asked for clarification on various requirements of the final amendments in a July 12, 2016, letter.[2] The EPA addressed many of the clarification requests from the July 2016 letter and the petition for reconsideration in a letter issued on April 7, 2017.[3] API and AFPM also raised additional issues associated with the implementation of the final rule amendments in a March 28, 2017, letter to the EPA [4] and provided a list of typographical errors in the rule in a January 27, 2017, meeting [5] with the EPA. On January 10, 2018, AFPM submitted a letter containing a comparison of the electronic CFR, the **Federal Register** documents, and the redline versions of the December 2015 Rule and October 2016 amendments to the Refinery Sector Rule noting differences and providing suggestions as to how these discrepancies should be resolved.[6] These items are located in Docket ID No. EPA–HQ–OAR–2016–0682. On April 10, 2018 (83 FR 15848), the EPA published proposed additional revisions to the December 2015 Rule addressing many of the issues and clarifications identified by API and AFPM in their February 2016 petition for reconsideration and their subsequent communications with the EPA.

On July 10, 2018, the EPA published a proposed rule (July 2018 Proposal) to revise the compliance date for maintenance vents located at sources constructed on or before June 30, 2014, from August 1, 2017, to January 30, 2019, (83 FR 31939; July 10, 2018). We proposed to change the compliance date to address challenges petroleum refinery owners or operators are experiencing in attempting to comply with the December 2015 Rule maintenance vent requirements, notwithstanding the additional compliance time provided by our revision of the compliance date to August 1, 2017, plus an additional 1-year (*i.e.,* August 1, 2018) compliance extension granted by the relevant permitting authorities for each source pursuant to the requirements set forth in the General Provisions at 40 CFR 63.6(i). The requirements for maintenance vents promulgated in the December 2015 Rule resulted in the need for completing the ''management of change process'' for affected sources (81 FR 45232, 45237, July 13, 2016). We also recognized that the Agency had proposed technical revisions and clarifications to the maintenance vent provisions in the April 2018 Proposal and that an extension would also allow the EPA to take final action on that proposal prior to the extended compliance date. Technical revisions and clarifications are being finalized in today's rule.

The April 2018 Proposal provided a 45-day comment period ending on May 25, 2018. The EPA received 16 comments on the proposed amendments from refiners, equipment manufacturers, trade associations, environmental groups, and private citizens. The July 2018 Proposal provided a 30-day comment period ending on August 9, 2018. The EPA received comments on the proposed revisions from refiners, trade associations, environmental groups, and private citizens. This preamble to the final rule provides a discussion of the final revisions, including changes in response to comments on the proposal, as well as a summary of the significant comments received and responses.

III. What is included in this final rule?

A. Clarifications and Technical Corrections to Refinery MACT 1

1. Definitions

What is the history of the definitions addressed in the April 2018 Proposal?

In the April 2018 Proposal, we proposed to amend four definitions: Flare purge gas, supplemental natural gas, relief valve, and reference control technology for storage vessel and to define an additional term. Specific to flare purge gas, we proposed for the term to include gas needed for other safety reasons. For flare supplemental gas, we proposed to amend the definition to specifically exclude assist air or assist steam. For relief valves we narrowed the definition to include PRDs that are designed to re-close after the pressure relief. As a complementary amendment, we proposed to add a definition for PRD. Finally, we proposed to revise the definition of reference control technology for storage vessels to be consistent with the storage vessel rule requirements in section 63.660.

What key comments were received on definitions?

We did not receive public comments on the proposed addition and revisions of these definitions.

[1] Supplemental Request for Administrative Reconsideration of Targeted Elements of EPA's Final Rule ''Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards; Final Rule,'' Howard Feldman, API, and David Friedman, AFPM. February 1, 2016. Docket ID No. EPA–HQ–OAR–2010–0682–0892.

[2] Letter from Matt Todd, API, and David Friedman, AFPM, to Penny Lassiter, EPA. July 12, 2016. Available in Docket ID No. EPA–HQ–OAR–2010–0682.

[3] Letter from Peter Tsirigotis, EPA, to Matt Todd, API, and David Friedman, AFPM. April 7, 2017. Available at: *https://www.epa.gov/stationarysources-air-pollution/december-2015-refinerysector-rule-response-letters-qa.*

[4] Letter from Matt Todd, API, and David Friedman, AFPM, to Penny Lassiter, EPA. March 28, 2017. Available in Docket ID No. EPA–HQ–OAR–2010–0682.

[5] Meeting minutes for January 27, 2017, EPA meeting with API. Available in Docket ID No. EPA–HQ–OAR–2010–0682.

[6] David Friedman, ''Comparison of Official CFR and e-CFR Postings Regarding MACT CC/UUU and NSPS Ja Postings.'' Message to Penny Lassiter and Brenda Shine. January 10, 2018. Email.

What is the EPA's final decision on the definitions?

We are finalizing the addition and revisions of these definitions as proposed.

2. Miscellaneous Process Vent Provisions

In the April 2018 Proposal, we proposed several amendments to address petitioners' requests for revisions and clarifications to the requirements identifying and managing the subset of miscellaneous process vents (MPV) that result from maintenance activities. In the July 2018 Proposal, we proposed to change the compliance date of the requirements for existing maintenance vents. We describe each of these proposals in the following subparagraphs.

a. Notice of Compliance Status (NOCS) Report

What is the history of the NOCS report for MPV addressed in the April 2018 Proposal?

In their March 28, 2017, letter (Docket ID No. EPA–HQ–OAR–2010–0682–0915), API and AFPM noted that the MPV provisions at section 63.643(c) do not require an owner or operator to designate a maintenance vent as Group 1 or Group 2 MPV. However, they stated that the reporting requirements at section 63.655(f)(1)(ii) are unclear as to whether a NOCS report is needed for some or all maintenance vents. We did not intend for maintenance vents to be included in the NOCS report. The rule has separate requirements for characterizing, recording, and reporting maintenance vents in section 63.655(g)(13) and (h)(12); therefore, it is not necessary to identify each place where equipment may be opened for maintenance in a NOCS report. To clarify this, we proposed to add language to section 63.643(c) to explicitly state that maintenance vents need not be identified in the NOCS report.

What key comments were received on the NOCS report for MPV provisions?

We did not receive comments on the proposed amendment in section 63.643(c) to explicitly state that maintenance vents need not be identified in the NOCS report.

What is the EPA's final decision on the NOCS report for MPV provisions?

We are finalizing the amendment in section 63.643(c) as proposed.

b. Maintenance Vents Associated With Equipment Containing Pyrophoric Catalysts

What is the history of regulatory text for maintenance vents associated with equipment containing pyrophoric catalyst addressed in the April 2018 Proposal?

Under 40 CFR 63.643(c) an owner or operator may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed, or placed into service. Facilities generally must comply with one of three conditions prior to venting maintenance vents to the atmosphere (section 63.643(c)(1)(i)–(iii)). However, section 63.643(c)(1)(iv) of the December 2015 Rule provides flexibility for maintenance vents associated with equipment containing pyrophoric catalyst (or simply ''pyrophoric units''), such as hydrotreaters and hydrocrackers, at refineries that do not have pure hydrogen supply. At many refineries, pure hydrogen is generated by steam-methane reforming (SMR), with hydrogen concentrations of 98 volume percent or higher. The other source of hydrogen available at refineries is from the CRU. This catalytic reformer hydrogen may have hydrogen concentrations of 50 percent or more and may contain appreciable concentrations of light hydrocarbons which limit the ability of vents associated with this source of hydrogen to meet the lower explosive limit (LEL) of 10 percent or less. The December 2015 Rule limits the flexibility to maintenance vents associated with pyrophoric units at refineries without a pure hydrogen supply. For pyrophoric units at a refinery without a pure hydrogen supply, the December 2015 Rule provides that the LEL of the vapor in the equipment must be less than 20 percent, except for one event per year not to exceed 35 percent.

API and AFPM took issue with the regulatory language that drew a distinction based on whether there is a pure hydrogen supply located at the refinery. As described in the preamble to the April 2018 Proposal (83 FR 15462), we reviewed comments from API and AFPM as well as additional information contained in an August 1, 2017, letter (Docket ID No. EPA–HQ–OAR–2010–0682–0916) which provided evidence that a single refinery may have many pyrophoric units, some that have a pure hydrogen supply and some that do not have a pure hydrogen supply. Thus, our assumption at the time we issued the December 2015 Rule that all pyrophoric units at a single refinery either would or would not have a pure hydrogen supply was incorrect. Therefore, we proposed to modify the portion of the regulatory text that distinguished units based on whether there was a pure hydrogen supply ''at the refinery'' and instead base the regulation on whether a pure hydrogen supply was available for the pyrophoric unit.

What key comments were received on the regulatory text for maintenance vents associated with equipment containing pyrophoric catalyst?

Comment b.1: One commenter (–0953) stated that the proposed language is inadequately defined, and allows the refiner to opt in to the provision providing flexibility by, for example, shutting down the source of the pure hydrogen supply.

Response b.1: In most cases, the pyrophoric unit will be supplied by either pure SMR hydrogen or catalytic reforming hydrogen. As purging with hydrogen is one of the steps used to de-inventory this equipment, the refiner cannot shutdown the hydrogen supply prior to de-inventorying the equipment. If a pyrophoric unit can be supplied with either SMR and catalytic reformer hydrogen, and the SMR hydrogen is being used during normal operations of the pyrophoric unit prior to de-inventorying the unit, we consider it a violation of the good air pollution control practices requirement in section 63.643(n) to switch the hydrogen supply only for de-inventorying the equipment. We also note that the refiner must keep records of the lack of a pure hydrogen supply as required at section 63.655(i)(12)(v).

Comment b.2: One commenter stated that the EPA has not provided any assessment of the potential increase of uncontrolled emissions to the atmosphere, or an analysis of the increase in health risks or the environmental impact of the proposed exemption, or an assessment of the industry-provided cost data.

Response b.2: The docket for the rulemaking includes the information upon which we based our decisions, including costs and environmental impact estimates of the provision providing flexibility to maintenance vents associated with pyrophoric units without a pure hydrogen supply. We had reviewed this information and determined that it was a reasonable estimate of the impacts (see Docket ID Nos. EPA–HQ–OAR–2010–0682–0733 and –0909). This information supports our statement in the April 2018

Proposal that this amendment is not projected to appreciably impact emission reductions associated with the standard. In fact, considering secondary emissions from the flare or other control system needed to comply with the 10 percent LEL limit, this provision providing flexibility to maintenance vents associated with pyrophoric units without a pure hydrogen supply is expected to result in a net environmental benefit.

Comment b.3: One commenter stated that the exemption does not comport with the requirements of CAA section 112(d)(2)–(3), which requires the standards to be no less stringent than the maximum achievable control technology (MACT) floor. The commenter points to the voluntary survey of hydrogen production units as submitted by API and notes that 12 of 62 units not connected to a pure hydrogen supply reported being able to comply with the 10 percent LEL standard. As such, the commenter contends that the MACT floor should be 10 percent LEL for equipment containing pyrophoric catalysts regardless of whether or not they are connected to a pure hydrogen supply and, thus, there should be no alternative based on whether or not a pure hydrogen supply is available. Furthermore, the commenter stated that costs cannot be used as justification for providing a higher emission limit alternative to MACT standards, particularly those based on the MACT floor.

Response b.3: As an initial matter, the EPA did not intend to re-open the issue of what is the MACT floor for pyrophoric units through the proposal. Rather, the issue raised was whether the flexibility provided should only be for pyrophoric units located at a refinery without a pure hydrogen supply or should also apply to pyrophoric units located at a facility that has a pure hydrogen supply but for which pure hydrogen is not available at the unit. Regardless, we disagree with the commenter that the survey results submitted by API support a conclusion that 10 percent LEL is the MACT floor for all pyrophoric units. The survey provided by API was not the type of rigorous survey that could provide a basis for establishing the MACT floor. As an initial matter, the API survey did not include the universe of pyrophoric units and there is no information to suggest whether the best performers for the subset of units addressed in the survey represents the top performing 12 percent of sources across the industry. Also, because the exact questions and definitions of terms were not provided, there may be some misinterpretation of the results. For example, it is unclear from the summary provided if the question was whether the facility owners or operators could meet 10 percent LEL for all events (*i.e.,* a never-to-be-exceeded limit) or if this was more of an operational average.

We agree with the commenter that costs cannot be considered in establishing a MACT standard. We based this provision on an assessment of the overall environmental impacts associated with the emission limitations and concluded that the best performing pyrophoric units without a pure hydrogen supply, when considering secondary impacts, was to meet a 20 percent LEL with one exception not to exceed 35 percent LEL per year. The API survey does not provide support to change our analysis of the MACT floor in the December 2015 Rule.

Comment b.4: One commenter (–0958) pointed out that the proposed amendment to section 63.643(c)(1)(iv) is inconsistent with the description of the amendment included in the preamble to the April 2018 Proposal. Specifically, the description of the amendment in the preamble of the April 2018 Proposal does not contain the additional phrase, ''considering all such maintenance vents at the refinery,'' which was included in the amendatory text. The commenter suggested that the EPA delete this phrase as it could be interpreted to limit the use of the 35 percent allowance to once per year per refinery rather than to once per year per piece of equipment.

Response b.4: We agree that the preamble discussion and the rule language regarding these revisions are not consistent. We did not intend to limit the one time per year 35 percent LEL to the refinery; rather, we intended it to apply to each pyrophoric unit without a pure hydrogen supply. Consistent with our intent as expressed in the preamble discussion of the April 2018 Proposal, 83 FR at 15462, we are removing the phrase, ''considering all such maintenance vents at the refinery'' from the regulatory text at section 63.643(c)(1)(iv) for the final amendments promulgated by this rulemaking.

What is the EPA's final decision on the regulatory text for maintenance vents associated with equipment containing pyrophoric catalyst?

We are finalizing the proposed amendment with one change. In response to the public comments received, we are not including the phrase ''considering all such maintenance vents at the refinery'' in the final regulatory text at section 63.643(c)(1)(iv), as revised by this rulemaking.

c. Control Requirements for Maintenance Vents

What is the history of the provisions for the control requirements for maintenance vents addressed in the April 2018 Proposal?

Paragraph 63.643(a) specifies that Group 1 miscellaneous process vents must be controlled by 98 percent or to 20 parts per million by volume or to a flare meeting the requirements in section 63.670. This paragraph also states in the second sentence that requirements for maintenance vents are specified in section 63.643(c), ''and the owner or operator is only required to comply with the requirements in section 63.643(c).'' Paragraphs (c)(1) through (3) then specify requirements for maintenance vents. Paragraph (c)(1) requires that equipment must be depressured to a control device, fuel gas system, or back to the process until one of the conditions in paragraph (c)(1)(i) through (iv) is met. In reviewing these rule requirements, the EPA noted that we did not specify that the control device in (c)(1) must also meet the Group 1 miscellaneous process vent control device requirements in paragraph (a). The second sentence in section 63.643(a) could be misinterpreted to mean that a facility complying with the maintenance vent provisions in section 63.643(c) must only comply with the requirements in paragraph (c) and not the control requirements in paragraph (a) for the control device referenced by paragraph (c)(1). In omitting these requirements, we did not intend that the control requirement for maintenance vents prior to atmospheric release would not be compliant with Group 1 controls as specified in section 63.643(a). In order to clarify this intent, we proposed to amend paragraph section 63.643(c)(1) to include control device specifications equivalent to those in section 63.643(a).

What key comments were received on the provisions for the control requirements for maintenance vents?

We received one comment in support of this revision.

What is the EPA's final decision on the provisions for the control requirements for maintenance vents?

We are finalizing the amendment to § 63.643(c)(1) to include control device specifications equivalent to those in § 63.643(a), as proposed.

d. Additional Maintenance Vent Alternative for Equipment Blinding

What is the history of the maintenance vent alternative for equipment blinding addressed in the April 2018 Proposal?

We proposed a new alternative compliance option for the subset of maintenance vents subject to the provisions addressed at § 63.643(c)(v). The proposed alternative compliance option would apply to equipment that must be blinded to seal off hydrocarbon-containing streams prior to conducting maintenance activities.

What key comments were received on the maintenance vent alternative for equipment blinding?

We received two comments on the proposed amendment. One commenter expressed concern regarding the burden of the recordkeeping associated with this alternative compliance option. The second commenter asserted that the use of work practice standards for maintenance vents is illegal. As detailed in the comment summaries and responses included in the response to comment document for this final rule (Docket ID No. EPA–HQ–OAR–2010–0682), we were not persuaded to make changes to the proposed amendments.

What is the EPA's final decision on the maintenance vent alternative for equipment blinding?

We are finalizing the new alternative compliance option for the subset of maintenance vents subject to the requirements of § 63.643(c)(v) for which equipment blinding is necessary, as proposed.

e. Recordkeeping for Maintenance Vents on Equipment Containing Less Than 72 Pounds per Day (lbs/day) of Volatile Organic Compounds (VOC)

What is the history of the provisions regarding recordkeeping for maintenance vents on equipment containing less than 72 lbs/day of VOC provisions addressed in the April 2018 Proposal?

Under section 63.643(c) an owner or operator may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed, or placed into service. The rule specifies that prior to venting a maintenance vent to the atmosphere, process liquids must be removed from the equipment as much as practical and the equipment must be depressured to a control device, fuel gas system, or back to the process until one of several conditions, as applicable, is met. One condition specifies that equipment containing less than 72 lbs/day of VOC can be depressured directly to the atmosphere provided that the mass of VOC in the equipment is determined and provided that refiners keep records of the process units or equipment associated with the maintenance vent and the date of each maintenance vent opening, and the estimate of the total quantity of VOC in the equipment at the time of vent opening. Therefore, each maintenance vent opening would be documented on an event-basis.

Industry petitioners noted that there are numerous routine maintenance activities, such as replacing sampling line tubing or replacing a pressure gauge, that involve potential releases of very small amounts of VOC, often less than 1 lb/day, that are well below the 72 lbs/day of VOC threshold provided in section 63.643(c)(1)(iii). They claimed that documenting each individual event is burdensome and unnecessary. As stated in the preamble to the April 2018 Proposal (83 FR 15463), the EPA agrees that documentation of each release from maintenance vents which serve equipment containing less than 72 lbs/day of VOC is not necessary provided there is a demonstration that the event is compliant with the requirement that the equipment contains less than 72 lbs/day of VOC. Therefore, we proposed to revise the event-specific recordkeeping requirements specific to maintenance vent openings in equipment containing less than 72 lbs/day of VOC to only require a record demonstrating that the total quantity of VOC in the equipment based on the type, size, and contents is less than 72 lbs/day of VOC at the time of the maintenance vent opening.

What key comments were received on the recordkeeping for maintenance vents on equipment containing less than 72 lbs/day of VOC provisions?

We received two comments on this proposed amendment. One commenter maintained that the event-specific recordkeeping requirements are too burdensome, while the other commenter maintained that the recordkeeping requirements are not adequate to assure compliance with the rule. As detailed in the comment summaries and responses included in the response to comment document for this final rule (Docket ID No. EPA–HQ–OAR–2010–0682), we concluded that the proposed amendment struck the right balance between requiring the necessary information needed to demonstrate and enforce compliance with the 72 lbs/day of VOC maintenance vent provision while reducing the recordkeeping and reporting burden with more detailed records.

What is the EPA's final decision on the recordkeeping for maintenance vents on equipment containing less than 72 lbs/day of VOC provisions?

We are finalizing these amendments as proposed.

f. Bypass Monitoring for Open-Ended Lines (OEL)

What is the history of the bypass monitoring provisions for OELs addressed in the April 2018 Proposal?

API and AFPM requested clarification of the bypass monitoring provisions in section 63.644(c) for OEL (Docket ID Nos. EPA–HQ–OAR–2010–0682–0892 and –0915). This provision excludes components subject to the Refinery MACT 1 equipment leak provisions in section 63.648 from the bypass monitoring requirement. Noting that the provisions in section 63.648 only apply to components in organic hazardous air pollutants (HAP) service (*i.e.,* greater than 5-weight percent HAP), API and AFPM asked whether the EPA also intended to exclude open-ended valves or lines that are in VOC service (less than 5-weight percent HAP) and are capped and plugged in compliance with the standards in NSPS subpart VV or VVa or the Hazardous Organic NESHAP (HON; 40 CFR part 63, subpart H) that are substantively equivalent to the Refinery MACT 1 equipment leak provisions in section 63.648. Commenters noted that OELs in conveyances carrying a Group 1 MPV could be in less than 5-weight percent HAP service, but could still be capped and plugged in accordance with another rule, such as NSPS subpart VV or VVa or the HON. As stated in the preamble to the proposed rule (83 FR 15464), the EPA agrees that, because the use of a cap, blind flange, plug, or second valve for an open-ended valve or line is sufficient to prevent a bypass, the Refinery MACT 1 bypass monitoring requirements in section 63.644(c) are redundant with NSPS subpart VV in these cases. Therefore, we proposed to amend section 63.644(c) to make clear that open-ended valves or lines that are capped and plugged sufficient to meet the standards in NSPS subpart VV at § 60.482–6(a)(2), (b), and (c), are not subject to the bypass monitoring in section 63.644(c).

What key comments were received on the bypass monitoring provisions for OELs?

Comment f.1: One commenter (–0958) expressed support for the addition of

the bypass monitoring option for capped or plugged OELs in section 63.644(c)(3). The commenter suggested that the EPA similarly amend section 63.660(i)(2) to provide this new monitoring alternative for vent systems handling Group 1 storage vessel vents. A different commenter (–0953) opposed this revision, stating that the EPA did not show or provide any evidence to support the statement that the monitoring requirements are ''redundant with NSPS subpart VV.'' The commenter recommended that the EPA require a compliance demonstration or otherwise demonstrate that the provisions are equivalent.

Response f.1: The December 2015 Rule bypass provisions require either a flow indicator or the use of a valve locked in a non-diverting position using a car-seal or lock and key. The general equipment leak provisions for OELs are installation of a plug, cap or secondary valve. Based on the effectiveness of this equipment work practice standard, continuous or periodic monitoring of these secondarily-sealed lines are not generally required. With the elimination of the exemption for discharges associated with maintenance activities and process upsets under the definition of ''periodically discharged'' in the December 2015 Rule, there are a number of process lines that are not traditional bypass lines and that were not previously considered an MPV or an MPV bypass, but now are. Many of these lines are small and not conducive to the installation of a car-seal or lock and key so they cannot comply with the current bypass provisions. Most of these small lines have been previously regulated via Refinery MACT 1's requirement to comply with the NSPS open-ended line provisions, which are an effective means to control emissions from these smaller lines. Because the existing equipment leak provisions for these types of OELs serve the same purpose and are more appropriate for these smaller lines, we determined that it is reasonable to provide for this method of compliance for these OELs.

What is the EPA's final decision on the bypass monitoring provisions for OELs?

We are finalizing this amendment as proposed. In response to comments received on the proposed rule, we are providing this new monitoring alternative for vent systems handling Group 1 storage vessel vents at section 63.660(i)(2) in the final rule.

g. Compliance Date Extension for Existing Maintenance Vents

What is the history of the compliance date extension for existing maintenance vents addressed in the July 2018 Proposal?

In the July 2018 Proposal, we proposed to amend the compliance date for maintenance vent provisions applicable to existing sources (*i.e.,* those constructed or reconstructed on or before June 30, 2014) promulgated at 40 CFR 63.643(c). The basis for this proposal was that sources needed additional time to follow the ''management of change'' process. We also noted that we had proposed substantive revisions to the maintenance vent requirements as part of the April 2018 Proposal.

What significant comments were received on the compliance date extension for existing maintenance vents?

Comment g.1: One commenter (–0968) stated that the proposed compliance extension is arbitrary and capricious because the EPA has not provided any evidence as to why refineries could not comply with the August 1, 2017, compliance date and why a revised compliance date of January 30, 2019, is as expeditious as practicable, as required by CAA section 112(i)(3)(A). The commenter noted that the EPA referred to the fact that some number of refinery owners and operators have applied for and received compliance extensions of up to one year from their permitting authorities pursuant to 40 CFR 63.6(i), but does not provide any evidence of these applications or subsequent state agency determinations in the rulemaking record. The commenter further noted that the EPA's failure to provide this information in the record for the rulemaking has inhibited the public's ability to provide fully informed comments, and as such, the EPA is in violation of the notice-and-comment and public participation requirements of CAA section 307(d). The commenter also disagreed with the EPA's statement in the preamble of the July 2018 Proposal that the source requests for an extension from the permitting authorities is demonstrative of refinery owners and operators acting on ''good faith efforts.'' Rather, the commenter asserted that the filing of these requests shows an avoidance of compliance with the rule.

The commenter stated that the proposed compliance extension is particularly harmful since the EPA has acknowledged that there are significant disproportionate impacts of refinery pollution to communities of color and low-income people. The commenter noted that the EPA has not supported the conclusion in the July 2018 Proposal that the extension of compliance would have an insignificant effect on emissions reductions. A separate commenter (–0971) concurred with the EPA's conclusions that the proposed compliance extension would have an insignificant effect on emissions reductions.

The commenter also stated that the EPA's reliance on regulatory uncertainty due to the April 2018 Proposal as part of the justification for the need for a compliance extension is at odds with the CAA's explicit prohibition on any delay or postponement of a final rule based on reconsideration (see CAA section 307(d)(7)(B)). The commenter further added that this provision only allows the EPA to stay a rule's effective date during reconsideration, not to postpone compliance, and only enables the EPA to do so for up to three months. Another commenter (–0971) expressed support for the proposed compliance extension for maintenance vents because of regulatory uncertainty since the EPA proposed amendments in April 2018 Proposal, but has not yet finalized those proposed amendments. The commenter stated that these revisions are critical to providing certainty as to what is required and to assure equipment may be isolated for maintenance under all expected maintenance situations. The commenter noted that maintenance vents are located across the refinery, and time will be needed to review procedures that would implement those revisions under refinery management of change processes, incorporate the changes into refinery compliance procedures and recordkeeping and reporting systems, and provide training to employees.

Response g.1: The EPA is not finalizing the extension of the compliance date as proposed in July 2018. However, in order to provide sources with time to understand the amended maintenance requirements, to determine which maintenance compliance option best meets their needs, and to come into compliance we are modifying the compliance date so that it is 30 days following the effective date of the final rule. Due to the variety of different types of maintenance vents and their ubiquitous nature, there has been some uncertainty as to how the maintenance vent requirements apply; whether the provisions, as promulgated, are appropriate for all types of vents; and the time needed to make the requisite modifications to ensure

compliance. The maintenance vent provisions in their current form were promulgated in the December 2015 Rule in order to replace a start-up, shutdown and malfunction (SSM) provision that was included in the original MACT standard. The EPA was replacing the SSM provisions because in *Sierra Club* v. *EPA,* [551 F.3d 1019 (D.C. Cir. 2008)], the D.C. Circuit determined that SSM provisions, similar to those included in the Refinery MACT were inconsistent with the requirements of the CAA. The EPA originally provided a compliance date as of the effective date of the December 2015 Rule (January 30, 2016), but subsequently extended that date to August 2017 based on information from refineries that they needed more time to comply. As previously noted, many refineries sought a further extension until August 2018 from state permitting authorities. Establishing a compliance date 30 days following promulgation of these revisions will allow refineries a modest amount of time to ensure any remaining maintenance vents not yet in compliance with the MACT, as modified through this final action, are in compliance.

With respect to the comments on the effect of emissions reductions relative to the July 2018 Proposal, we reached this conclusion based on several factors. First, maintenance events typically occur about once per year or less frequently for major equipment. Thus, during the proposed period of the compliance extension (approximately 6 months from the August 2018 compliance date that applied to most refineries due to extensions granted by state permitting authorities), some equipment would have no major events and other equipment, at most, should experience only one event. Second, facilities would still be required to comply with the general requirements to use good air pollution control practices during maintenance events. Many facility owners or operators already have standard procedures for emptying and degassing equipment. While these procedures are not as stringent as the MACT requirements for maintenance vents as adopted in the December 2015 Rule and as we had proposed in April 2018, they would provide some limit on emissions to the atmosphere. In a meeting with industry representatives, an example of the type of emissions occurring from maintenance vents was provided to the Agency (Docket ID No. EPA–HQ–OAR–2010–0682–0909). Based on that example, the Agency estimates that approximately 200 lbs of VOC would be released from purging 6 pieces of equipment containing pyrophoric catalyst when venting at 35 percent LEL rather than 10 percent LEL. Based on our previous analysis of impacts for risk and technology review revisions to Refinery MACT 1, we estimate approximately 10 percent of VOC emissions are HAP, so that we estimate on the order of approximately 3 pounds of HAP emissions ($0.1 \times 200/6$) would occur per major equipment venting event. The maintenance vent provisions as adopted in the December 2015 Rule were projected to reduce emissions of HAP by 5,200 tons per year (80 FR 75178, December 1, 2015). Therefore, based on the low expected emissions from each major equipment venting event, the expected limited occurrence of maintenance venting events, and the likelihood that many types of maintenance venting events are in compliance with the MACT, the compliance extension would have an insignificant effect on emissions.

What is the EPA's final decision on the compliance date extension for existing maintenance vents?

The EPA is not finalizing the compliance extension as proposed in the July 2018 Proposal. However, in order to provide sources with time to understand the amended maintenance requirements, to determine which maintenance compliance option best meets their needs, and to come into compliance, we are modifying the compliance date so that it is 30 days following the effective date of the final rule.[7]

3. Pressure Relief Device Provisions

a. Clarification of Requirements for PRD ''in organic HAP service''

What is the history of the requirements for PRD ''in organic HAP service'' addressed in the April 2018 Proposal?

The introductory text for the equipment leak provisions for PRD in section 63.648(j) requires compliance with no detectable emission provisions for PRD ''in organic HAP gas or vapor service'' and the pressure release management requirements for PRD ''for all pressure relief devices.'' However, the pressure release management requirements for PRD in section 63.648(j)(3) are applicable only to PRD ''in organic HAP service.'' There are five specific provisions within the pressure release management requirements for PRD listed in paragraphs 63.648(j)(3)(i) through (v). In the first four paragraphs, the phrase ''each [or any] affected pressure relief device'' is used, but this phrase is missing in the fifth paragraph. API and AFPM requested that we clarify whether releases listed in section 63.648(j)(3)(v) are limited to PRDs ''in organic HAP service.'' Consistent with the requirements in section 63.648(j)(3)(i) through (iv) and the Agency's intent when promulgating the provisions in section 63.648(j)(3), we proposed to add the phrase, ''affected pressure relief device'' to section 63.648(j)(3)(v). We also proposed to amend the introductory text in paragraph (j) to add the phrase, ''in organic HAP service'' at the end of the last sentence to further clarify that the pressure release management requirements for PRD in section 63.648(j)(3) are applicable to ''all pressure relief devices in organic HAP service.''

What key comments were received on the requirements for PRD ''in organic HAP service''?

We did not receive any public comments on these proposed amendments.

What is the EPA's final decision on the requirements for PRD ''in organic HAP service''?

We are finalizing these amendments as proposed.

b. Redundant Release Prevention Measures in 40 CFR 63.648(j)(3)(ii)

What is the history of the requirements for redundant release prevention measures addressed in the April 2018 Proposal?

Section 63.648(j)(3)(ii) lists options for three redundant release prevention measures that must be applied to affected PRDs. The prevention measures in paragraph (j)(3)(ii) include: (A) Flow, temperature, level, and pressure indicators with deadman switches, monitors, or automatic actuators; (B) documented routine inspection and maintenance programs and/or operator training (maintenance programs and operator training may count as only one redundant prevention measure); (C) inherently safer designs or safety instrumentation systems; (D) deluge systems; and (E) staged relief system where initial pressure relief valves (with lower set release pressure) discharges to a flare or other closed vent system and control device. In their petition for reconsideration (Docket ID No. EPA–HQ–OAR–2010–0682–0892), API and AFPM requested clarification as to whether two prevention measures can be selected from the list in § 63.648(j)(3)(ii)(A). API and AFPM noted that the rule does not state that the measures in paragraph (j)(3)(ii)(A)

[7] Cf. 5 U.S.C. 553(d) providing a 30-day period prior to a rule taking effect.

are to be considered a single prevention measure. The Agency grouped the measures listed in subparagraph A together because of similarities they have; however, they can be separate measures. Therefore, as the EPA explains in the preamble to the April 2018 Proposal (83 FR 15464), if these measures operate independently, they are considered two separate redundant prevention measures.

What key comments were received on the requirements for redundant release prevention measures?

We did not receive any public comments on this proposed amendment.

What is the EPA's final decision on the requirements for redundant release prevention measures?

We are finalizing the amendment to § 63.648(j)(3)(ii)(A), which clarifies that independent, non-duplicative systems count as separate redundant prevention measures, as proposed.

c. Pilot-Operated PRD and Balanced Bellows PRD

What is the history of the provisions for pilot-operated PRD and balanced bellows PRD addressed in the April 2018 Proposal?

In a letter dated March 28, 2017, API and AFPM requested clarification on whether pilot-operated PRDs are required to comply with the pressure release management provisions of section 63.648(j)(1) through (3). Based on our understanding of pilot-operated PRD (see memorandum, ''Pilot- operated PRD,'' in Docket ID No. EPA–HQ–OAR–2010–0682) and balanced bellows PRD, we proposed that pilot-operated and balanced bellows PRD are subject to the requirements in section 63.648(j)(1) and (2), but are not subject to the requirements in section 63.648(j)(3) because the primary releases from these PRD are vented to a control device. We also proposed to amend the reporting requirements in section 63.655(g)(10) and the recordkeeping requirements in section 63.655(i)(11) to retain the requirements to report and keep records of each release to the atmosphere through the pilot vent that exceeds 72 lbs/day of VOC, including the duration of the pressure release through the pilot vent and the estimate of the mass quantity of each organic HAP release.

What key comments were received on the provisions for pilot-operated PRD and balanced bellows PRD?

We received one public comment on this proposed amendment. The commenter was generally opposed to the addition of balanced bellows and pilot-operated PRD to the work practice standard requirements for PRD. The comment and the EPA's response are available in the response to comments document for this rulemaking (Docket ID No. EPA–HQ–OAR–2010–0682).

What is the EPA's final decision on the provisions for pilot-operated PRD and balanced bellows PRD?

We are finalizing these amendments as proposed.

4. Delayed Coking Unit Decoking Operation Provisions

What is the history of the delayed coking unit decoking operation provisions addressed in the April 2018 Proposal?

The provisions in 40 CFR 63.657(a) require owners or operators of DCU to depressure each coke drum to a closed blowdown system until the coke drum vessel pressure or temperature meets the applicable limits specified in the rule (2 psig or 220 degrees Fahrenheit for existing sources). Special provisions are provided in 40 CFR 63.657(e) and (f) for DCU using ''water overflow'' or ''double-quench'' method of cooling, respectively. According to 40 CFR 63.657(e), the owner or operator of a DCU using the ''water overflow'' method of coke cooling must hardpipe the overflow water (*i.e.,* via an overhead line) or otherwise prevent exposure of the overflow water to the atmosphere when transferring the overflow water to the overflow water storage tank whenever the coke drum vessel temperature exceeds 220 degrees Fahrenheit. The provision in 40 CFR 63.657(e) also provides that the overflow water storage tank may be an open or fixed-roof tank provided that a submerged fill pipe (pipe outlet below existing liquid level in the tank) is used to transfer overflow water to the tank.

In the October 18, 2016, reconsideration proposal, we opened the provisions in 40 CFR 63.657(e) for public comment, but we did not propose to amend the requirements. In response to the October 18, 2016, reconsideration proposal, we received several comments regarding the provisions in 40 CFR 63.657(e) for DCU using the water overflow method of coke cooling. Based on these comments, in the April 2018 Proposal we proposed amendments to the water overflow requirements in 40 CFR 63.657(e) to clarify that an owner or operator of a DCU with a water overflow design does not need to comply with the provisions in 40 CFR 63.657(e) if they comply with the primary pressure or temperature limits in 40 CFR 63.657(a) prior to overflowing any water. We also proposed to add a requirement to use a separator or disengaging device when using the water overflow method of cooling to prevent entrainment of gases from the coke drum vessel to the overflow water storage tank and we proposed that gases from the separator must be routed to a closed vent blowdown system or otherwise controlled following the requirements for a Group 1 miscellaneous process vent. As separators appear to be an integral part of the water overflow system design, we did not project any capital investment or additional operating costs associated with this proposed amendment.

What key comments were received on the delayed coking unit decoking operation provisions?

The following is a summary of the key comments received in response to our April 2018 Proposal and our responses to these comments. Detailed public comments and the EPA responses are included in the response to comments document for this final action (Docket ID EPA–HQ–OAR–2010–0682).

Comment 1: Industry commenters (–0955, –0958) stated that the proposed amendment to require DCU using the water overflow compliance option to have a disengaging device is unsupported by the record for the proposed rule and was not included in the Information Collection Request (ICR) or MACT floor analysis supporting the December 2015 Rule. The commenters noted that the EPA has not determined how many DCU use the water overflow method of coke cooling or how many will require the installation of a disengaging device, instead basing the provisions on a report by one facility using such a device. The same commenters stated that the EPA has not quantified the expected emission reductions associated with the proposed amendment to require DCU using the water overflow compliance option to have a disengaging device. One of the commenters (–0955) maintained that the emissions from the overflow water are small and sufficiently controlled via the submerged fill requirement. This commenter provided various analyses to support their contention that the emissions from their overflow water are small, including results of facility-specific industrial hygiene monitoring programs, which the commenter claims have shown that operators exposures to benzene are ''orders of magnitude below the Occupational Safety and Health Administration (OSHA) exposure limit of 1.0 parts per million (ppm), at 0.003 ppm (300 parts per billion (ppb)) and

less.'' Both of these commenters also asserted that the EPA should not finalize the proposed amendment to require DCU using the water overflow compliance option to have a disengaging device.

Another commenter (–0953) asserted that the EPA did not provide any quantitative assessment of emissions from water overflow DCU compared to the primary MACT standard in order to demonstrate that the water overflow is at least as stringent as the MACT floor requirement (no draining or venting until the pressure in the drum is at or below 2 psig). According to the commenter, without this direct supporting analysis, the EPA's inclusion of the water overflow provision is arbitrary and capricious. The commenter recommended that the water overflow provisions not be finalized or that additional control requirements be placed on the storage tank receiving the water overflow. Specifically, the commenter recommended that the rule require these tanks to be vented to a control device that achieves 98-percent destruction efficiency or better. Alternatively, the commenter recommended that the EPA develop minimum requirements for the liquid height and volume of water in the receiving tank and a maximum limit on the temperature of the water in the tank. The commenter also recommended that the EPA set restrictions on the re-use of the overflow water without prior additional treatment to remove organic contaminants.

Two commenters (–0955, –0958) stated that, if the requirement to use a disengaging device is finalized, the EPA should provide a compliance date 3 years after the effective date of the rule, as provided under CAA section 112(i)(3)(A), due to the expected expense and timing needed for equipment installation to comply with this requirement. One commenter (–0955) described the specific steps required for a DCU system not equipped with a disengaging device to comply with the proposed rule including: Design, engineering, permit application submission and permit receipt, and installation, estimating it will take between 24–36 months to complete.

Response 1: We agree that we did not include the water overflow provisions in the MACT floor analysis supporting the December 2015 Rule. The MACT floor analysis resulted in a determination that emissions from the DCU must be controlled (no atmospheric venting, draining or deheading of the coke drum) until the coke drum vessel pressure is at or below 2 psig is the MACT floor. In developing an alternative compliance method, such as the DCU water overflow provisions, we are only required to ensure that the alternative being provided is at least as stringent (achieves the same or lower emissions) as the established MACT floor.

We disagree that the record does not support the proposal. In comments received on the June 30, 2014, proposed risk and technology review ''Sector Rule,'' Phillips 66 requested special provisions for water overflow (see Docket ID No. EPA–HQ–OAR–0682–0614). Further, we understood from background meetings that there are two main suppliers of DCU technology, one of which took over the ConocoPhillips technology licenses (see Docket ID No. EPA–HQ–OAR–2010–0682–0216). As Phillips 66 was an initial developer of the technology, we surmised that the DCU designed for water overflow were likely all based on the Phillips 66 design. They also noted in their comments that they operated two units with water overflow design. While the ICR supporting the December 2015 Rule did not specifically ask about the water overflow method of cooling, we did ask the height of the drum and the height of the water in the drum prior to first draining. Three DCU were reported to have water height when first draining equal to the drum height and two DCU were reported to have water height greater than the drum height. From these data, we estimated that 2 to 5 DCU used the water overflow method of cooling. We understood that Phillips 66 likely operated most of the DCU designed to use the water overflow method of cooling. Therefore, when Phillips 66 provided a water overflow DCU design that included a water-vapor disengaging drum, we expected all water overflow DCU had this design. In subsequent meetings with API and AFPM, we discussed our findings and our intention to add a requirement for a vapor disengaging drum (see Docket ID No. EPA–HQ–OAR–2010–0682–0910 and –0911). These records clearly show we carefully considered this proposed requirement and we informed industry representatives from API, AFPM, and some individual refinery representatives of our conclusions prior to the proposal.

We agree that the EPA has not provided a quantitative assessment of the emissions from the DCU when using water overflow. Rather, for the December 2015 Rule, we relied on a qualitative assessment because the precise mechanism of the emissions from the DCU is not well understood. This qualitative analysis did not consider the entrainment of gases in the overflow water or the need for the use of a disengaging drum. To support this final action, we estimated, to the best of our ability, the emissions from a typical DCU using water overflow method of cooling for units using a vapor disengaging device and one with no vapor disengaging device and compared them with the emissions projected for a DCU using conventional method of cooling complying with the 2 psig MACT standard. We found that the emissions from a DCU using water overflow method of cooling and a vapor disengaging device had emissions significantly less than a conventional DCU complying with the 2 psig standard. We also found that the emissions from a DCU using the water overflow method of cooling without a vapor disengaging device could have emissions exceeding those for a conventional DCU complying with the 2 psig pressure limit (see memorandum entitled ''Estimating Emissions from Delayed Coking Units Using the Water Overflow Method of Cooling'' in Docket ID No. EPA–HQ–OAR–2010–0682). Our emission estimates are higher than the emissions estimated by the commenter because their analyses did not consider entrained gases in the overflow water. In a follow-up meeting with this commenter, we learned that the concentration monitored near the overflow water tank was 0.3 ppm benzene (consistent with the value of 300 ppb). This concentration, while below the OSHA exposure limit of 1 ppm, is not ''orders of magnitude below'' the OSHA exposure limit and provides strong evidence that emissions near the water overflow tank are higher than would be projected based on their analysis submitted during the comment period.

Based on our analysis, we find that the water overflow method of cooling alternative achieves greater emission reductions than the primary 2 psig pressure limit when a vapor disengaging device is used for the overflow water prior to the water storage tank. Because emissions without the disengaging device in the case where the receiving tank is not vented to a control device can exceed that of a conventional DCU complying with the 2 psig pressure limit, we conclude that it is necessary for the alternative compliance method to require use of a disengaging device unless the receiving tank is vented to a control device.

Although cost consideration is not relevant for determining MACT, we disagree that the EPA did not consider the expense of installing a disengaging device. As part of the cost estimates for the DCU MACT requirements established in the December 2015 Rule,

80 FR 75226, we considered compliance costs for every DCU that did not already meet the 2 psig pressure limit. Because we already considered compliance costs in our burden estimates for the December 2015 Rule, there was no basis for assuming that compliance with the alternative standard proposed here would result in additional or otherwise different compliance costs and to do so would result in double-counting the compliance costs.

With respect to the commenter requesting additional controls on the tank receiving the water overflow, our analysis supports the conclusion that the main source of emissions from the water overflow systems is entrained vapors in the overflow water. We agree that venting the receiving tank to a control device is a reasonable alternative to using a disengaging device and we have added this as an alternative compliance option for DCU using the water overflow method of cooling. However, venting the receiving tank to a control device when a vapor disengaging device is already used is unnecessary and redundant. We agree that adding certain limitations on overflow water temperature, receiving tank water volume and temperature can help to reduce emissions when a vapor disengaging device is not used, but we do not believe adding these limitations will make water overflow without a vapor disengaging device equivalent to the primary 2 psig emission limitation. Based on our analysis, we find that the use of a disengaging device with submerged fill requirement is as stringent as the MACT floor and that additional restrictions on the receiving storage vessel for these DCU are not necessary to comply with MACT.

Finally, regarding the compliance date, we agree that it will take time to design, procure, and install a disengaging drum for those DCU using water overflow and that do not currently have a disengaging drum. Similarly, venting the receiving tank to a control device as an alternative to using a disengaging device will also require time to design and retrofit the tank with a fixed roof and closed vent system to control. We originally provided a 3-year compliance schedule due to the design, engineering, and equipment installation that could be required to meet the emission limitations for DCU in the December 2015 Rule. As the December 2015 Rule did not require a vapor disengaging drum or controlled tank and similar enhancements in the enclosed blowdown system will be needed for facilities to comply with the April 2018 Proposal, we are providing a limited compliance extension, of 2 years from the effective date of this final rule that alters the work practice standard by establishing the vapor disengaging drum requirement. This extension will only be afforded for DCU that use the water overflow method of cooling without adequate systems for a vapor disengaging device or controlled tank, which we consider to be as expeditious as practicable based on comments received on the April 2018 Proposal. We are also including operational requirements on the water overflow system for these DCU in the interim to minimize emissions to the greatest extent possible as requested by one of the commenters. These operational limits will not require any additional equipment, so implementation can occur immediately. We do not expect that these operational limits are sufficient to ensure that emissions from these units will be less than conventional DCU complying with the 2 psig standard at all times, but they will help to ensure emissions are not unrestricted in this interim period. We also note that pursuant to the provisions in § 63.6(i), which are generally applicable, refinery owners or operators may seek compliance extensions on a case-by-case basis if necessary.

What is the EPA's final decision on the delayed coking unit decoking operation provisions?

We are finalizing the requirement for DCU using the water overflow provisions in section 63.657(e) to use a separator or disengaging device to prevent entrainment of gases in the cooling water. In response to comments, we are providing a limited compliance extension, of 2 years from the effective date of this final rule, only for DCU that use the water overflow method of cooling that document the need to design, procure, and install a disengaging device, which we consider to be as expeditious as practicable based on comments received on the April 2018 Proposal. We are providing operational restrictions on these DCU in the interim to minimize emissions to the greatest extent possible. Finally, in response to comments, we are including, as an alternative to the use of a vapor disengaging drum, requirements to discharge the overflow water to a storage vessel vented to a control device (*i.e.,* a vessel meeting the requirements for storage vessels in 40 CFR part 63, subpart SS).

5. Fenceline Monitoring Provisions

What is the history of the fenceline monitoring provisions addressed in the April 2018 Proposal?

We proposed several amendments to the fenceline monitoring provisions in Refinery MACT 1. Many of the proposed revisions to the fenceline monitoring provisions are related to requirements for reporting monitoring data.

The December 2015 Rule included new EPA Methods 325A and B specifying monitor siting and quantitative sample analysis procedures. Method 325A requires an additional monitor be placed near known VOC emission sources if the VOC emissions source is located within 50 meters of the monitoring perimeter and the source is between two monitors. In the April 2018 Proposal, we proposed an alternative to the additional monitor siting requirements if the only known VOC emission sources within 50 meters of the monitoring perimeter between two monitors are pumps, valves, connectors, sampling connections, and open-ended line sources. The proposed alternative requires that these sources be actively monitored monthly using audio, visual, or olfactory means and quarterly using Method 21 or the AWP for equipment leaks.

In addition, we proposed to revise the quarterly reporting requirements in section 63.655(h)(8) to specify that it means calendar year quarters (*i.e.,* Quarter 1 is from January 1 to March 31; Quarter 2 is from April 1 through June 30; Quarter 3 is from July 1 through September 30; and Quarter 4 is from October 1 through December 31) rather than being tied to the date compliance monitoring began.

We also proposed to require one field blank per sampling period rather than two as currently required. Similarly, we proposed to decrease the number of duplicate samples that must be collected each sampling period. Instead of requiring a duplicate sample for every 10 monitoring locations, we proposed that facilities with 19 or fewer monitoring locations be required to collect one duplicate sample per sampling period and facilities with 20 or more sampling locations be required to collect two duplicate samples per sampling period. We also proposed to require that duplicate samples be averaged together to determine the sampling location's benzene concentration for the purposes of calculating the benzene concentration difference (Δc).

Consistent with the requirements in section 63.658(k) for requesting an alternative test method for collecting

and/or analyzing samples, we also proposed to revise the Table 6 entry for section 63.7(f) to indicate that section 63.7(f) applies except that alternatives directly specified in 40 CFR part 63, subpart CC, do not require additional notification to the Administrator or the approval of the Administrator.

What key comments were received on the fenceline monitoring provisions?

We received minor comments on these proposed revisions. The comment summaries and the EPA responses are available in the response to comments document for this final rule (Docket ID No. EPA–HQ–OAR–2010–0682).

What is the EPA's final decision on the fenceline monitoring provisions?

The proposed revisions to the fenceline monitoring requirements, as described above, are being finalized as proposed with one minor change. In the April 2018 proposal, § 63.655(h)(8)(viii) specified that CEDRI would calculate the biweekly concentration difference (Δc) for benzene for each sampling period and the annual average Δc for benzene for each sampling period. However, in order to accurately reflect CEDRI's current configuration, we are finalizing § 63.655(h)(8)(viii) to require the reporter to calculate and report the values of the biweekly and annual average Δc for benzene.

6. Storage Vessel Provisions

What is the history of the storage vessel provisions addressed in the April 2018 Proposal?

We received comments from API and AFPM in their February 1, 2016, petition for reconsideration regarding the incorporation of 40 CFR part 63, subpart WW, storage vessel provisions and 40 CFR part 63, subpart SS, closed vent systems and control device provisions into Refinery MACT 1 requirements for Group 1 storage vessels at 40 CFR 63.660. The pre-amended version of the Refinery MACT 1 rule specified (by cross reference at 40 CFR 63.646) that storage vessels containing liquids with a vapor pressure of 76.6 kilopascals (approximately 11 pounds per square inch (psi)) or greater must be vented to a closed vent system or to a control device consistent with the requirements in section 63.119 of the HON. API and AFPM pointed out that the EPA did not retain this provision at 40 CFR 63.660 in the December 2015 Rule. We agree that the language was inadvertently omitted. We did not intend to deviate from the longstanding requirement limiting the vapor pressure of material that can be stored in a floating roof tank. Therefore, we proposed to revise the introductory text in 40 CFR 63.660 to clarify that owners or operators of affected Group 1 storage vessels storing liquids with a maximum true vapor pressure less than 76.6 kilopascals (11.0 psi) can comply with either the requirements in 40 CFR part 63, subpart WW or SS, and that owners or operators storing liquids with a maximum true vapor pressure greater than or equal to 76.6 kilopascals (11.0 psi) must comply with the requirements in 40 CFR part 63, subpart SS.

We also received comments from API and AFPM in their February 1, 2016, petition for reconsideration regarding provisions in section 63.660(b). Section 63.660(b)(1) allows Group 1 storage vessels to comply with alternatives to those specified in section 63.1063(a)(2) of subpart WW. Section 63.660(b)(2) specifies additional controls for ladders having at least one slotted leg. The petitioners explained that section 63.1063(a)(2)(ix) provides extended compliance time for these controls, but that it is unclear whether this additional compliance time extends to the use of the alternatives to comply with section 63.660(b). We proposed language to clarify that the additional compliance time specified in the alternative included at section 63.1063(a)(2) applies to the implementation of controls in section 63.660(b).

We also proposed language to clarify at section 63.660(e) that the initial inspection requirements that apply with initial filling of the storage vessels are not required again if a vessel transitions from the existing source requirements in section 63.646 to new source requirements in section 63.660.

The following is a summary of the comment received in response to our April 2018 Proposal and our response to this comment. We did not receive any other comments related to the proposed amendments for storage vessels.

What comment was received on the storage vessel provisions?

Comment 1: One commenter (–0958) claims that the EPA proposed revisions to the introductory paragraph of section 63.660 to allow certain storage vessels to comply with alternative requirements is not an acceptable control measure. The commenter states that the proposed revisions included 11.0 psia as parenthetical equivalent to the 76.6 kPa threshold. The commenter recommended that the EPA revise the 11.0 psia to 11.1 psia as this represents a more accurate conversion and consistency with historical regulations.

Response 1: Upon reviewing this issue, we agree with the commenter that 11.1 psia is the correct value to use when converting 76.6 kilopascals to psia and we are revising the proposed language to use 11.1 psia rather than 11.0 psia in this introductory paragraph.

What is the EPA's final decision on the storage vessel provisions?

After considering public comments on the proposed amendments, the EPA is finalizing the amendment to the introductory text in 40 CFR 63.660 with a change from 11.0 psia to 11.1 psia. We are finalizing the amendments to section 63.660(b) and section 63.660(e) as proposed.

7. Flare Control Device Provisions

What is the history of the flare control device provisions addressed in the April 2018 Proposal?

API and AFPM requested clarification in a December 1, 2016, letter to the EPA (Docket ID No. EPA–HQ–OAR–2010–0682–0913) regarding assist steam line designs that entrain air into the lower or upper steam at the flare tip. The industry representatives noted that many of the steam-assisted flare lines have this type of air entrainment and likely were part of the dataset analyzed to develop the standards established in the December 2015 Rule for steam-assisted flares. API and AFPM, therefore, maintain that these flares should not be considered to have assist air, and that they are appropriately and adequately regulated under the final standards in the December 2015 Rule for steam-assisted flares. Because flares with assist air are required to comply with both a combustion zone net heating value (NHV_{cz}) and a net heating value dilution parameter (NHV_{dil}), there is increased burden in having to comply with two operating parameters, and API and AFPM contend that this burden is unnecessary.

In the preamble to the April 2018 Proposal, we stated that air intentionally entrained through steam nozzles meets the definition of assist air. However, we also noted that if this is the only assist air introduced prior to or at the flare tip, it is reasonable in most cases for the owner or operator to only need to comply with the NHV_{cz} operating limit. We also noted that, for flare tips with an effective tip diameter of 9 inches or more, there are no flare tip steam induction designs that can entrain enough assist air to cause a flare operator to have a deviation of the NHV_{dil} operating limit without first deviating from the NHV_{cz} operating limit. Therefore, we proposed in section 63.670(f)(1) to allow owners or operators of flares whose only assist air is from perimeter assist air entrained in lower

and upper steam at the flare tip and with a flare tip diameter of 9 inches or greater to comply only with the NHV_{cz} operating limit. Steam-assisted flares with perimeter assist air and an effective tip diameter of less than 9 inches would remain subject to the requirement to account for the amount of assist air intentionally entrained within the calculation of NHV_{dil}. We further proposed to add provisions to section 63.670(i)(6) specifying that owners or operators of these smaller diameter steam-assisted flares use the steam flow rate and the maximum design air-to-steam ratio of the steam tube's air entrainment system for determining the flow rate of this assist air.

We also proposed several clarifying amendments for flares in response to API and AFPM's February 1, 2016, petition for reconsideration (Docket ID No. EPA–HQ–OAR–2010–0682–0892) as outlined below.

- For air assisted flares, we proposed to amend section 63.670(i)(5) to include provisions for continuously monitoring fan speed or power and using fan curves for determining assist air flow rates to clarify that this is an acceptable method of determining air flow rates.
- We proposed two amendments relative to the visible emissions monitoring requirements in section 63.670(h) and (h)(1). We proposed to clarify that the initial 2-hour visible emission demonstration should be conducted the first time regulated materials are routed to the flare. We also proposed to amend section 63.670(h)(1) to clarify that the daily 5-minute observations must only be conducted on days the flare receives regulated materials and that the additional visible emissions monitoring is specific to cases when visible emissions are observed while regulated material is routed to the flare.
- We proposed to amend section 63.670(o)(1)(iii)(B) to clarify that the owner or operator must establish the smokeless capacity of the flare in a 15-minute block average and to amend section 63.670(o)(3)(i) to clarify that the exceedance of the smokeless capacity of the flare is based on a 15-minute block average.

What comments were received on the flare control device provisions?

The following is a summary of one comment received in response to our April 2018 Proposal and our response to this comment. All other comments related to the proposed amendments for the flare provisions are included in the response to comments document for this final action (Docket ID No. EPA–HQ–2010–0682).

Comment 1: One commenter (–0958) explained that assist air may only be entrained in upper steam. Thus, they requested that the proposed revision to section 63.670(f)(1) and section 63.670(i)(6) be changed from ''lower and upper'' to ''lower and/or upper.'' The commenter also requested that the EPA clarify that the tip diameter referenced in section 63.670(i)(6) is the effective diameter as defined in section 63.670(n)(1) and section 63.670(k)(1). Finally, the commenter requested that the EPA clarify that section 63.670(i)(6) applies to flares with an effective diameter less than 9 inches and stated that perimeter air monitoring for a steam-assisted flare with an effective diameter equal to or greater than 9 inches is not required.

Response 1: We did not mean to limit the air entrainment provisions to only instances where air is entrained in both lower and upper steam at the flare tip. We agree that the language ''lower and/or upper steam'' is more accurate and consistent with our intent. We also agree that we should refer to the ''effective diameter'' of the flare tip as defined in the equation for NHV_{dil} in section 63.670(n)(1). This clarification was made in section 63.670(f)(1); this term is not used in section 63.670(i)(6).

What is the EPA's final decision on the flare control device provisions?

After considering the comments, we are finalizing the proposed amendment in section 63.670(f)(1) and section 63.670(i)(6) with a change in language from ''lower and upper'' to ''lower and/or upper.'' We are also finalizing the proposed amendment in section 63.670(f)(1) with a change in language from ''flare tip diameter'' to ''effective diameter,'' a term that is defined in section 63.670(n)(1) and section 63.670(k)(1). The proposed clarifying amendments related to air assisted flares, visible emissions monitoring requirements, and smokeless capacity of the flare are being finalized as proposed.

8. Recordkeeping and Reporting Provisions

What is the history of the recordkeeping and reporting provisions addressed in the April 2018 Proposal?

We proposed several clarifying amendments for recordkeeping and reporting requirements in response to questions received from API and AFPM as well as in response to API and AFPM's March 28, 2017, letter (Docket ID No. EPA–HQ–OAR–2010–0682–0915).

Refinery owners or operators must submit a NOCS with 150 days of the compliance date associated with the provisions in the December 2015 Rule. We proposed to amend sections 63.655(f) and (f)(6) to provide that sources having a compliance date on or after February 1, 2016, may submit the NOCS in the periodic report rather than as a separate submission.

We proposed several amendments for electronic reporting requirements at sections 63.655(f)(1)(i)(B)(3) and (C)(2), (f)(1)(iii), (f)(2), and (f)(4) to clarify that when the results of performance tests or evaluations are reported in the NOCS, the results are due by the date the NOCS is due, whether the results are reported via Compliance and Emissions Data Reporting Interface (CEDRI) or in hard copy as part of the NOCS report. If the results are reported via CEDRI, we also proposed to specify that sources need not resubmit those results in the NOCS, but may instead submit specified information identifying that a performance test or evaluation was conducted and the units and pollutants that were tested. We also proposed to add the phrase ''Unless otherwise specified by this subpart'' to sections 63.655(h)(9)(i) and (ii) to make clear that test results associated with a NOCS report are due at the time the NOCS is due and not within 60 days of completing the performance test or evaluation. We also proposed to amend several references in Table 6—General Provisions Applicability to Subpart CC that discuss reporting requirements for performance tests or performance evaluations.

We proposed to revise the provision in section 63.655(h)(10) to include processes to assert claims of EPA system outage or *force majeure* events as a basis for extending the electronic reporting deadlines.

We also proposed to revise section 63.655(i)(5) to restore the subparagraphs which were inadvertently not included in the published CFR due to a clerical error.

The amendments to section 63.655(h)(5)(iii) included in the December 2015 Rule (80 FR 75247) were not included in the regulations as published by the CFR. As reflected in the instructions to the amendments, we intended for the option to use an automated data compression recording system to be an approved monitoring alternative. In addition, in reviewing this amendment, the EPA noted that 40 CFR 63.655(h)(5) specifically addresses mechanisms for owners or operators to request approval for alternatives to the continuous operating parameter monitoring and recordkeeping provisions, while the provisions in 40 CFR 63.655(i)(3) specifically include

options already approved for continuous parameter monitoring system (CPMS). Consistent with our intent for the use of an automated data compression recording system to be an approved monitoring alternative, we proposed to move paragraph 63.655(h)(5)(iii) to 63.655(i)(3)(ii)(C).

Finally, we proposed a number of editorial and other corrections in Table 2 of the April 2018 Proposal (83 FR 15470).

What significant comments were received on the recordkeeping and reporting provisions?

The following is a summary of the significant comments received in response to our April 2018 Proposal and our response to these comments. All other comments related to the proposed amendments for the recordkeeping and reporting provisions are included in the response to comments document for this final action (Docket ID No. EPA–HQ–2010–0682).

Comment 1: One commenter (–0958) objected to the proposed revisions to section 63.655(f) and section 63.655(f)(6) which require facilities to include their NOCS in the periodic report following the compliance activity. The commenter suggested that the EPA revert to the 150-day NOCS submission requirements as was included in the December 2015 Rule amendments for the sources listed in Table 11 of 40 CFR part 63, subpart CC, which have a compliance date on or after February 1, 2016. The commenter explained that for petroleum refinery owners and operators completing compliance activities requiring an NOCS in the latter half of the periodic reporting period, as little as 60 days could be provided to perform the test and generate the submission in order to include it in the periodic report.

Response 1: The proposed revisions were specifically included to address the commenter's original request to align the new compliance notifications with the semiannual periodic reports to reduce burden. As the commenter has withdrawn the request for these revisions, we are not finalizing these proposed revisions.

Comment 2: One commenter (–0958) supported the proposed revision allowing petroleum refinery owners and operators to request an extension for reporting under specified circumstances. One such circumstance is if the EPA's electronic reporting systems is out-of-service in the five business days prior to the report due date. Proposed revisions in section 63.655(h)(10)(i) and section 63.1575(l)(1) require the extension request to include the date, time, and length of the electronic reporting system outage. The commenter requested that the EPA remove these details from the requirements for the extension request as this is information the EPA, rather than the reporter, keeps. The commenter suggested that the EPA could require reporters to identify the dates on which they attempted to access the system in the 5-day period preceding the reporting due date.

Response 2: We agree with the commenter. While users may know the length of time for a planned outage, as this information is provided to users, it is unlikely that a user will know the length of time for an unplanned outage. However, users will know the dates and times that they attempted but were unable to access the system. Therefore, we have revised the language in section 63.655(h)(10)(i) and section 63.1575(l)(1) to state that owner or operators must provide information on the date(s) and time(s) the Central Data Exchange (CDX) or the CEDRI was unavailable when the user attempted to access it in the 5 business days prior to the submission deadline.

What is the EPA's final decision on the recordkeeping and reporting provisions?

In response to the public comments received, we are not finalizing the proposed amendments to section 63.655(f) and section 63.655(f)(6) which require facilities to include their NOCS in the periodic report following the compliance activity.

Also in response to the public comments received, we are finalizing the proposed amendment to section 63.655(h)(10) with changes. In the final rule, a refinery owner or operator's request for an extension must include information on the date(s) and time(s) the CDX or the CEDRI was unavailable when the user attempted to access it in the 5 business days prior to the submission deadline, rather than requiring information regarding the length of the outage.

We are finalizing the amendments to the electric reporting requirements in sections 63.655(f)(1)(i)(B)(3) and (C)(2), (f)(1)(iii), (f)(2), and (f)(4), sections 63.655(h)(9)(i) and (ii), and Table 6—General Provisions Applicability to 40 CFR part 63, subpart CC, as proposed.

We are finalizing the restoration of paragraph 63.655(i)(5), as proposed. We are also finalizing moving paragraph 63.655(h)(5)(iii) to 63.655(i)(3)(ii)(C), as proposed. We are also finalizing the editorial and other corrections in Table 2 of the April 2018 Proposal (83 FR 15470), as proposed.

B. Clarifications and Technical Corrections to Refinery MACT 2

1. FCCU Provisions

What is the history of the FCCU provisions addressed in the April 2018 Proposal?

In order to demonstrate compliance with the alternative particulate matter (PM) standard for FCCU as provided at section 63.1564(a)(5)(ii), the outlet (exhaust) gas flow rate of the catalyst regenerator must be determined. As provided in section 63.1573(a), owners or operators may determine this flow rate using a flow CPMS or an alternative. Currently, the language in section 63.1573(a) restricts the use of the alternative to occasions when ''the unit does not introduce any other gas streams into the catalyst regenerator vent.'' API and AFPM (Docket ID No. EPA–HQ–OAR–2010–0682–0915) claim that while this restriction is appropriate for determining the flow rate for applying emissions limitations downstream of the regenerator because additional gases introduced to the vent would not be measured using this method, it is not a necessary constraint for determining compliance with the alternative PM limit. This is because the alternative PM standard applies at the outlet of the regenerator prior to the primary cyclone inlet and this is the flow measured by the alternative in section 63.1573(a). As described in the preamble of the April 2018 Proposal (83 FR 15471). We proposed to amend section 63.1573(a) to remove that restriction.

Additionally, API and AFPM noted in their February 1, 2016, petition (EPA–HQ–OAR–2010–0682–0892) for reconsideration that the FCCU alternative organic HAP standard for startup, shutdown, and hot standby in section 63.1565(a)(5)(ii) requires maintaining the oxygen concentration in the regenerator exhaust gas at or above 1 volume percent (dry) (*i.e.,* greater than or equal to 1-percent oxygen (O_2) measured on a dry basis); however, they claim process O_2 analyzers measure O_2 on a wet basis. As described in the preamble of the April 2018 Proposal (83 FR 15471), meeting the 1-percent O_2 standard on a wet basis measurement will always mean that there is more O_2 than if the concentration value is corrected to a dry basis. As such, we proposed to amend section 63.1565(a)(5)(ii) and Table 10 to allow for the use of a wet O_2 measurement for demonstrating compliance with the standard so long as it is used directly with no correction for moisture content.

The following is a summary of the one comment received in response to our April 2018 Proposal and our response to this comment on the proposed amendments to the FCCU provisions.

What comment was received on the FCCU provisions?

Comment 1: One commenter (–0958) supported the EPA's proposed revisions to section 63.1573(a)(1), which allows the use of the inlet velocity requirement during periods of startup, shutdown, and malfunction (SSM) for an FCCU as an alternative to the PM standard regardless of the configuration of the catalytic regenerator exhaust vent stream. The same commenter suggested additional clarifications relative to the alternative PM standard. These clarifications include:

(1) Amending the last sentence in section 63.1573(a)(1) to clarify that the requirement to use the same procedure for performance tests and subsequent monitoring does not apply to the use of the alternative in section 63.1564(c)(5), since the alternative only applies during SSM.

(2) Revising the first sentence of section 63.1573(a)(2) to specifically allow use for demonstrating compliance with section 63.1564(c)(5).

(3) Amending the footnote to Item 12 in Table 3 to make it clear that either alternative in (a)(1) or (a)(2) is acceptable for demonstrating compliance. The commenter also recommended providing a separate footnote as other items reference footnote 1.

(4) Adding the footnote from Item 12 in Table 3 to Item 10 in Table 7.

Response 1: We agree with the commenter that the last sentence in section 63.1573(a)(1) is provided to ensure that the operating limits are established using the same monitoring techniques as the on-going monitoring. As no site-specific operating limit is required for compliance with section 63.1564(c)(5), that requirement is not applicable to this additional allowance of this alternative. We are revising the language in the final rule to clarify.

We disagree that it is appropriate to revise the first sentence in section 63.1573(a)(2), as requested by the commenter, because the flow rate must be determined based on actual flow conditions, not standard conditions; therefore, Equation 2 in section 63.1573 is not applicable to demonstrate compliance with section 63.1564(c)(5).

What is the EPA's final decision on the FCCU provisions?

In consideration of public comments, we are finalizing the amendments to the FCCU provisions, as proposed with one change to section 63.1573(a) to clarify that the provision does not apply to the use of the alternative in section 63.1564(c)(5).

2. Other Provisions

What is the history of the other Refinery MACT 2 provisions addressed in the April 2018 Proposal?

We proposed several clarifying amendments for other Refinery MACT 2 requirements in response to API and AFPM's petition for reconsideration (Docket ID No. EPA–HQ–OAR–2010–0682–0892) as well as in response to the API and AFPM's March 28, 2017, letter (Docket ID No. EPA–HQ–OAR–2010–0682–0915).

We proposed to amend section 63.1572(d)(1) to be consistent with the analogous language in section 63.671(a)(4).

We proposed to amend the recordkeeping requirements in section 63.1576(a)(2)(i) to apply only when facilities elect to comply with the alternative startup and shutdown standards provided in section 63.1564(a)(5)(ii), section 63.1565(a)(5)(ii), or sections 63.1568(a)(4)(ii) or (iii).

We proposed several amendments for electronic reporting including at section 63.1574(a)(3) to clarify that the results of performance tests conducted to demonstrate initial compliance are to be reported by the due date of the NOCS whether the results are reported via CEDRI or in hard copy as part of the NOCS report. If the results are reported via CEDRI, we also proposed to specify that sources need not resubmit those results in the NOCS, but may instead submit information identifying that a performance test or evaluation was conducted and the units and pollutants that were tested. We also proposed to amend the submission of the results of periodic performance tests and the 1-time hydrogen cyanide (HCN) test required in sections 63.1571(a)(5) and (6) to require inclusion with the semiannual compliance reports as specified in section 63.1575(f) instead of within 60 days of completing the performance evaluation. Similarly, we proposed to streamline reporting of the results of performance evaluations and continuous monitoring systems (as provided in item 2 to Table 43) to align with the semiannual compliance reports as specified in section 63.1575(f) rather than requiring a separate submission. We also proposed to add the phrase ''Unless otherwise specified by this subpart'' to sections 63.1575(k)(1) and (2) to make clear that performance tests or performance evaluations required to be reported in a NOCS report or a semiannual compliance report are not subject to the 60-day deadline specified in the paragraphs. We also proposed to add section 63.1575(l) to address extensions to electronic reporting deadlines. We also proposed clarifying amendments to several references in Table 44—Applicability of NESHAP General Provisions to 40 CFR part 63, subpart UUU.

Finally, we proposed a number of editorial and other corrections in Table 3 of the April 2018 Proposal (83 FR 15472).

The following is a summary of the significant comments received in response to our April 2018 Proposal and our response to these comments. It should be noted that the comment summary and response for the reporting extension in section 63.655(h)(10)(i) and section 63.1575(l)(1) is addressed in section III.A.8 of this preamble. All other comments related to the proposed amendments for the other Refinery MACT 2 provisions are included in the response to comments document for this final action (Docket ID No. EPA–HQ–2010–0682).

What significant comment was received on the other Refinery MACT 2 provisions?

Comment 1: One commenter (–0958) recommended that the EPA revise the proposed requirement in section 63.1571(a), (a)(5), (a)(6), and Table 6 Item 1.ii to complete initial PM (or nickel) performance test within 60 days of startup for new units to instead allow for completion and reporting of the performance test by the 150-day notice of compliance status date since a new unit may not be up to full production rates within the first 60 days.

Response 1: In reviewing the existing provisions regarding performance tests in Refinery MACT 2 (40 CFR part 63, subpart UUU), we agree that the initial performance tests are required to be completed and reported no later than 150 days after the compliance date (see section 63.1574(a)(3)(ii)). To better align the proposed revisions with the existing requirements, we are revising the proposed requirement to complete and report these tests no later than 150 days after the compliance date (see section 63.1574(a)(3)(ii)).

What is the EPA's final decision on the other Refinery MACT 2 provisions?

After considering public comment, we are finalizing these amendments with some revisions to the due dates for initial performance tests in sections 63.1571(a), (a)(5), (a)(6), and Table 6

Item 1.ii as well as edits to the proposed language in the extensions to electronic reporting provisions in section 63.1575(l) (as described in section III.A.8 of this preamble). We are finalizing the amendments at section 63.1572(d)(1), section 63.1576(a)(2)(i), and Table 3 of the April 2018 Proposal (83 FR 15472), as proposed.

C. Clarifications and Technical Corrections to NSPS Ja

We proposed three revisions in NSPS Ja to improve consistency, remove redundancy, and correct grammar at section 60.105a(b)(2)(ii), section 60.106a(a)(1)(vi), and section 60.106a(a)(1)(iii), respectively. We did not receive public comments on these proposed amendments. We are finalizing these amendments as proposed.

IV. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

As described in the April 2018 Proposal and associated memorandum titled, ''Projected Cost and Burden Reduction for the Proposed Amendments of the 2015 Risk and Technology Review: Petroleum Refineries,'' (Docket ID No. EPA–HQ–OAR–2010–0682–0925), the technical corrections and clarifications included in this final rule are expected to result in overall cost and burden reductions. Consistent with the April 2018 Proposal, the final amendments expected to reduce burden are: Revisions of the maintenance vent provisions related to the availability of a pure hydrogen supply for equipment containing pyrophoric catalyst, revisions of recordkeeping requirements for maintenance vents associated with equipment containing less than 72 lbs/day VOC, inclusion of specific provisions for pilot-operated and balanced bellows PRDs, and inclusion of specific provisions related to steam tube air entrainment for flares. The other final amendments included in this rulemaking will have an insignificant effect on the costs or burdens associated with the standards. Additionally, none of the final amendments are projected to appreciably impact the emissions reductions associated with these standards.

We are finalizing the provisions for maintenance vent recordkeeping and PRD as proposed, and, thus, the cost and burden reductions estimated in the April 2018 Proposal and supporting memorandum are still accurate. The final revisions to the recordkeeping requirements for maintenance vents associated with equipment containing less than 72 lbs/day VOC are estimated to yield savings of approximately $677,000 per year considering the actual estimated annualized burden of the December 2015 Rule. The final provisions for pilot-operated and balanced bellows PRDs included in this final rulemaking yield a reduction in capital investment of $1.1 million and a reduction in annualized costs of $330,000 per year considering the actual estimated annualized burden of the December 2015 Rule.

It should be noted that we are finalizing amendments to the proposed provisions for maintenance vent provisions related to the availability of a pure hydrogen supply for equipment containing pyrophoric catalyst and provisions related to steam tube air entrainment for flares with revisions as described in sections III.A.2 and III.A.7 of this preamble. The revisions described in sections III.A.2 and III.A.7 are not expected to impact the cost and burden reductions estimated in the referenced April 2018 Proposal and memorandum for these provisions, as they are clarifying in nature.

As explained in the April 2018 Proposal, there were no capital costs estimated for the maintenance vent provisions in the December 2015 Rule and only limited recordkeeping and reporting costs. Capital investment estimates provided by industry stakeholders for the maintenance vent provisions included in the December 2015 Rule was approximately $76 million. The inclusion of the capital costs for the maintenance vent provisions would have increased the previously estimated annualized cost included in the December 2015 Rule by $7,174,400 per year. Through the revisions being finalized in this rule, these costs will not be incurred by refinery owners and operators. Similarly, while significant capital and operating costs were projected for flares, we may have underestimated the number of steam-assisted flares that would also have to demonstrate compliance with the NHV_{dil} operating limit in the December 2015 Rule impacts analysis. Considering such flares, the annualized cost of the December 2015 Rule for steam-assisted flares would have increased the previously estimated annualized cost included in the December 2015 Rule by $3,300,000 per year. Through the revisions being finalized in this rulemaking which allows owners or operators of certain steam-assisted flares with air entrainment at the flare tip to comply only with the NHV_{cz} operating limits, these costs will not be incurred by refinery owners and operators.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders*.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. Details on the estimated cost savings of this final rule can be found in the EPA's analysis of the present value and annualized value estimates associated with this action located in Docket ID No. EPA–HQ–OAR–2010–0682.

C. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to OMB under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 1692.12. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

One of the final technical amendments included in this rule impacts the recordkeeping requirements in 40 CFR part 63, subpart CC for certain maintenance vents associated with equipment containing less than 72 lbs/day VOC as found at 40 CFR 63.655(i)(12)(iv). The new recordkeeping requirement specifies records used to estimate the total quantity of VOC in the equipment and the type and size limits of equipment that contain less than 72 lbs/day of VOC at the time of the maintenance vent opening be maintained. As specified in 40 CFR 63.655(i)(12)(iv), additional records are required if the inventory procedures were not followed for each maintenance vent opening or if the equipment opened exceeded the type and size limits (*i.e.,* 72 lbs/day VOC). These additional records include identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and records used to estimate the total quantity of VOC in the equipment at the

time the maintenance vent was opened to the atmosphere. These records will assist the EPA with determining compliance with the standards set forth in 40 CFR 63.643(c)(iv).

Respondents/affected entities: Owners or operators of existing or new major source petroleum refineries that are major sources of HAP emissions. The NAICS code is 324110 for petroleum refineries.

Respondent's obligation to respond: All data in the ICR that are recorded are required by the amendments to 40 CFR part 63, subpart CC, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries.

Estimated number of respondents: 142.

Frequency of response: Once per year per respondent.

Total estimated burden: 16 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $1,640 (per year), includes $0 annualized capital or operation and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. The action consists of amendments, clarifications, and technical corrections which are expected to reduce regulatory burden. As described in section IV of this preamble, we expect burden reduction for: (1) Revisions of the maintenance vent provisions related to the availability of a pure hydrogen supply for equipment containing pyrophoric catalyst, (2) revisions of recordkeeping requirements for maintenance vents associated with equipment containing less than 72 lbs/day VOC, (3) inclusion of specific provisions for pilot-operated and balanced bellows PRDs, and (4) inclusion of specific provisions related to steam tube air entrainment for flares. Furthermore, as noted in section IV of this preamble, we do not expect the final amendments to change the expected economic impact analysis performed for the existing rule. We have, therefore, concluded that this action will relieve regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effect on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The final amendments serve to make technical clarifications and corrections, as well as revise compliance dates. We expect the final revisions will have an insignificant effect on emission reductions. Therefore, the final amendments should not appreciably increase risk for any populations.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This rulemaking involves technical standards. As described in section III.C of this preamble, the EPA has decided to use the voluntary consensus standard ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses,'' as an acceptable alternative to EPA Methods 3A and 3B for the manual procedures only and not the instrumental procedures. This method is available at the American National Standards Institute (ANSI), 1899 L Street NW, 11th Floor, Washington, DC 20036 and the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016–5990. See *https://wwww.ansi.org* and *https://www.asme.org*.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The final amendments serve to make technical clarifications and corrections, as well as revise compliance dates. We expect the final technical clarifications and corrections will have an insignificant effect on emission reductions. The additional compliance time provided for existing maintenance vents is expected to have an insignificant effect on emission reductions as many refiners already have measures in place due to state and other federal requirements to minimize emissions during these periods. Further, the maintenance vent opening periods are relatively infrequent and are usually of short duration. Additionally, the final compliance date only provides approximately 6 months beyond the August 1, 2018, compliance date for most facilities, which are operating under 1-year compliance extensions (from the previous deadline of August 1, 2017) they received from states based on the procedure in 40 CFR 63.6(i). Therefore, the final amendments should

not appreciably increase risk for any populations.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of Congress and to the Comptroller General of the United States. This is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects

40 CFR Part 60

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: November 8, 2018.

Andrew R. Wheeler,

Acting Administrator.

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart A—General Provisions

■ 2. Section 60.17 is amended by revising paragraph (g)(14) to read as follows:

§ 60.17 Incorporations by reference.

* * * * *

(g) * * *

(14) ASME/ANSI PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], (Issued August 31, 1981), IBR approved for §§ 60.56c(b), 60.63(f), 60.106(e), 60.104a(d), (h), (i), and (j), 60.105a(b), (d), (f), and (g), 60.106a(a), 60.107a(a), (c), and (d), tables 1 and 3 to subpart EEEE, tables 2 and 4 to subpart FFFF, table 2 to subpart JJJJ, §§ 60.285a(f), 60.4415(a), 60.2145(s) and (t), 60.2710(s), (t), and (w), 60.2730(q), 60.4900(b), 60.5220(b), tables 1 and 2 to subpart LLLL, tables 2 and 3 to subpart MMMM, §§ 60.5406(c), 60.5406a(c), 60.5407a(g), 60.5413(b), 60.5413a(b), and 60.5413a(d).

* * * * *

Subpart Ja—Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

■ 3. Section 60.105a is amended by revising paragraph (b)(2)(ii) to read as follows:

§ 60.105a Monitoring of emissions and operations for fluid catalytic cracking units (FCCU) and fluid coking units (FCU).

* * * * *

(b) * * *

(2) * * *

(ii) The owner or operator shall conduct performance evaluations of each CO_2 and O_2 monitor according to the requirements in § 60.13(c) and Performance Specification 3 of appendix B to this part. The owner or operator shall use Method 3, 3A or 3B of appendix A–2 to this part for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses,'' (incorporated by reference—see § 60.17) is an acceptable alternative to EPA Method 3B of appendix A–2 to part 60.

* * * * *

■ 4. Section 60.106a is amended by revising paragraph (a)(1)(iii) to read as follows:

§ 60.106a Monitoring of emissions and operations for sulfur recovery plants.

(a) * * *

(1) * * *

(iii) The owner or operator shall conduct performance evaluations of each SO_2 monitor according to the requirements in § 60.13(c) and Performance Specification 2 of appendix B to part 60. The owner or operator shall use Method 6 or 6C of appendix A–4 to part 60. The method ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses,'' (incorporated by reference—see § 60.17) is an acceptable alternative to EPA Method 6.

* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 5. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart CC—National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

■ 6. Section 63.641 is amended by:
■ a. Revising the definitions of ''Flare purge gas'' and ''Flare supplemental gas'';
■ b. Adding a definition of ''Pressure relief device'' in alphabetical order;
■ c. Revising the introductory text and adding paragraphs (1)(i) and (ii) to the definition of ''Reference control technology for storage vessels''; and
■ d. Revising the definition of ''Relief valve''.

The revisions and addition read as follows:

§ 63.641 Definitions.

* * * * *

Flare purge gas means gas introduced between a flare header's water seal and the flare tip to prevent oxygen infiltration (backflow) into the flare tip or for other safety reasons. For a flare with no water seal, the function of *flare purge gas* is performed by flare sweep gas and, therefore, by definition, such a flare has no *flare purge gas*.

Flare supplemental gas means all gas introduced to the flare to improve the heat content of combustion zone gas. *Flare supplemental gas* does not include assist air or assist steam.

* * * * *

Pressure relief device means a valve, rupture disk, or similar device used only to release an unplanned, nonroutine discharge of gas from process equipment in order to avoid safety hazards or equipment damage. A pressure relief device discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause. Such devices include conventional, spring-actuated relief valves, balanced bellows relief valves, pilot-operated relief valves, rupture disks, and breaking, buckling, or shearing pin devices.

* * * * *

Reference control technology for storage vessels means either:

(1) * * *

(i) An internal floating roof, including an external floating roof converted to an internal floating roof, meeting the specifications of § 63.1063(a)(1)(i), (a)(2), and (b) and § 63.660(b)(2);

(ii) An external floating roof meeting the specifications of § 63.1063(a)(1)(ii), (a)(2), and (b) and § 63.660(b)(2); or

* * * * *

Relief valve means a type of pressure relief device that is designed to re-close after the pressure relief.

* * * * *

■ 7. Section 63.643 is amended by:
■ a. Revising paragraphs (c) introductory text, (c)(1) introductory text, and (c)(1)(ii) through (iv); and
■ b. Adding a new paragraph (c)(1)(v).

The revisions and addition read as follows:

§ 63.643 Miscellaneous process vent provisions.

* * * * *

(c) An owner or operator may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed or placed into service. The owner or operator does not need to designate a maintenance vent as a Group 1 or Group 2 miscellaneous process vent nor identify maintenance vents in a Notification of Compliance Status report. The owner or operator must comply with the applicable requirements in paragraphs (c)(1) through (3) of this section for each maintenance vent according to the compliance dates specified in table 11 of this subpart, unless an extension is requested in accordance with the provisions in § 63.6(i).

(1) Prior to venting to the atmosphere, process liquids are removed from the equipment as much as practical and the equipment is depressured to a control device meeting requirements in paragraphs (a)(1) or (2) of this section, a fuel gas system, or back to the process until one of the following conditions, as applicable, is met.

* * * * *

(ii) If there is no ability to measure the LEL of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the LEL of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent.

(iii) The equipment served by the maintenance vent contains less than 72 pounds of total volatile organic compounds (VOC).

(iv) If the maintenance vent is associated with equipment containing pyrophoric catalyst (*e.g.,* hydrotreaters and hydrocrackers) and a pure hydrogen supply is not available at the equipment at the time of the startup, shutdown, maintenance, or inspection activity, the LEL of the vapor in the equipment must be less than 20 percent, except for one event per year not to exceed 35 percent.

(v) If, after applying best practices to isolate and purge equipment served by a maintenance vent, none of the applicable criterion in paragraphs (c)(1)(i) through (iv) can be met prior to installing or removing a blind flange or similar equipment blind, the pressure in the equipment served by the maintenance vent is reduced to 2 psig or less, Active purging of the equipment may be used provided the equipment pressure at the location where purge gas is introduced remains at 2 psig or less.

* * * * *

■ 8. Section 63.644 is amended by:
■ a. Revising paragraph (c) introductory text;
■ b. Removing the period at the end of paragraph (c)(2) and adding ''; or'' in its place; and
■ c. Adding paragraph (c)(3).

The revision and addition read as follows:

§ 63.644 Monitoring provisions for miscellaneous process vents.

* * * * *

(c) The owner or operator of a Group 1 miscellaneous process vent using a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with paragraph (a) of this section either directly to the atmosphere or to a control device that does not comply with the requirements in § 63.643(a) shall comply with either paragraph (c)(1), (2), or (3) of this section. Use of the bypass at any time to divert a Group 1 miscellaneous process vent stream to the atmosphere or to a control device that does not comply with the requirements in § 63.643(a) is an emissions standards violation. Equipment such as low leg drains and equipment subject to § 63.648 are not subject to this paragraph (c).

* * * * *

(3) Use a cap, blind flange, plug, or a second valve for an open-ended valve or line following the requirements specified in § 60.482–6(a)(2), (b) and (c).

* * * * *

■ 9. Section 63.648 is amended by:
■ a. Revising the introductory text of paragraphs (a), (c), and (j); and
■ b. Revising paragraphs (j)(3)(ii)(A) and (E), (j)(3)(iv), (j)(3)(v) introductory text, and (j)(4).

The revisions read as follows:

§ 63.648 Equipment leak standards.

(a) Each owner or operator of an existing source subject to the provisions of this subpart shall comply with the provisions of 40 CFR part 60, subpart VV, and paragraph (b) of this section except as provided in paragraphs (a)(1) through (3), and (c) through (j) of this section. Each owner or operator of a new source subject to the provisions of this subpart shall comply with subpart H of this part except as provided in paragraphs (c) through (j) of this section.

* * * * *

(c) In lieu of complying with the existing source provisions of paragraph (a) in this section, an owner or operator may elect to comply with the requirements of §§ 63.161 through 63.169, 63.171, 63.172, 63.175, 63.176, 63.177, 63.179, and 63.180 except as provided in paragraphs (c)(1) through (12) and (e) through (j) of this section.

* * * * *

(j) Except as specified in paragraph (j)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (j)(1) and (2) of this section for pressure relief devices, such as relief valves or rupture disks, in organic HAP gas or vapor service instead of the pressure relief device requirements of § 60.482–4 or § 63.165, as applicable. Except as specified in paragraphs (j)(4) and (5) of this section, the owner or operator must also comply with the requirements specified in paragraph (j)(3) of this section for all pressure relief devices in organic HAP service.

* * * * *

(3) * * *

(ii) * * *

(A) Flow, temperature, liquid level and pressure indicators with deadman switches, monitors, or automatic actuators. Independent, non-duplicative systems within this category count as separate redundant prevention measures.

* * * * *

(E) Staged relief system where initial pressure relief device (with lower set release pressure) discharges to a flare or other closed vent system and control device.

* * * * *

(iv) The owner or operator shall determine the total number of release events occurred during the calendar year for each affected pressure relief device separately. The owner or operator shall also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a *force majeure* event, as defined in this subpart.

(v) Except for pressure relief devices described in paragraphs (j)(4) and (5) of this section, the following release events from an affected pressure relief device are a violation of the pressure release management work practice standards:

* * * * *

(4) *Pressure relief devices routed to a control device.* (i) If all releases and potential leaks from a pressure relief device are routed through a closed vent system to a control device, back into the process or to the fuel gas system, the owner or operator is not required to comply with paragraph (j)(1), (2), or (3) (if applicable) of this section.

(ii) If a pilot-operated pressure relief device is used and the primary release valve is routed through a closed vent system to a control device, back into the process or to the fuel gas system, the owner or operator is required to comply only with paragraphs (j)(1) and (2) of this section for the pilot discharge vent and is not required to comply with paragraph (j)(3) of this section for the pilot-operated pressure relief device.

(iii) If a balanced bellows pressure relief device is used and the primary release valve is routed through a closed vent system to a control device, back into the process or to the fuel gas system, the owner or operator is required to comply only with paragraphs (j)(1) and (2) of this section for the bonnet vent and is not required to comply with paragraph (j)(3) of this section for the balanced bellows pressure relief device.

(iv) Both the closed vent system and control device (if applicable) referenced in paragraphs (j)(4)(i) through (iii) of this section must meet the requirements of § 63.644. When complying with this paragraph (j)(4), all references to ''Group 1 miscellaneous process vent'' in § 63.644 mean ''pressure relief device.''

(v) If a pressure relief device complying with this paragraph (j)(4) is routed to the fuel gas system, then on and after January 30, 2019, any flares receiving gas from that fuel gas system must be in compliance with § 63.670.

* * * * *

■ 10. Section 63.655 is amended by:
■ a. Revising paragraphs (f)(1)(i)(A)(*1*) through (*3*), (f)(1)(i)(B)(*3*), (f)(1)(i)(C)(*2*), (f)(1)(iii), (f)(2), (f)(4), (g)(2)(i)(B)(*1*) and (g)(10) introductory text;
■ b. Redesignating paragraph (g)(10)(iii) as (g)(10)(iv);
■ c. Adding new paragraph (g)(10)(iii);
■ d. Revising paragraph (g)(13) introductory text and paragraph (h)(2)(ii);
■ e. Removing and reserving paragraph (h)(5)(iii);
■ f. Revising paragraph (h)(8)
■ g. Revising paragraph (h)(9)(i) introductory text and paragraph (h)(9)(ii) introductory text;
■ h. Adding paragraph (h)(10);
■ i. Revising paragraph (i)(3)(ii)(B);
■ j. Adding paragraphs (i)(3)(ii)(C) and (i)(5)(i) through (v);
■ k. Revising paragraphs (i)(7)(iii)(B) and (i)(11) introductory text;
■ l. Adding paragraph (i)(11)(iv);
■ m. Revising paragraph (i)(12) introductory text and paragraph (i)(12)(iv); and
■ n. Adding paragraph (i)(12)(vi).

The revisions and additions read as follows:

§ 63.655 Reporting and recordkeeping requirements.

* * * * *

(f) * * *

(1) * * *

(i) * * *

(A) * * *

(*1*) For each Group 1 storage vessel complying with either § 63.646 or § 63.660 that is not included in an emissions average, the method of compliance (*i.e.,* internal floating roof, external floating roof, or closed vent system and control device).

(*2*) For storage vessels subject to the compliance schedule specified in § 63.640(h)(2) that are not complying with § 63.646 or § 63.660 as applicable, the anticipated compliance date.

(*3*) For storage vessels subject to the compliance schedule specified in § 63.640(h)(2) that are complying with § 63.646 or § 63.660, as applicable, and the Group 1 storage vessels described in § 63.640(l), the actual compliance date.

(B) * * *

(*3*) If the owner or operator elects to submit the results of a performance test, identification of the storage vessel and control device for which the performance test will be submitted, and identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted. If the performance test is submitted electronically through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with § 63.655(h)(9), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the Notification of Compliance Status in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the Notification of Compliance Status is submitted.

(C) * * *

(*2*) If a performance test is conducted instead of a design evaluation, results of the performance test demonstrating that the control device achieves greater than or equal to the required control efficiency. A performance test conducted prior to the compliance date of this subpart can be used to comply with this requirement, provided that the test was conducted using EPA methods and that the test conditions are representative of current operating practices. If the performance test is submitted electronically through the EPA's Compliance and Emissions Data Reporting Interface in accordance with § 63.655(h)(9), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the Notification of Compliance Status in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the Notification of Compliance Status is submitted.

* * * * *

(iii) For miscellaneous process vents controlled by control devices required to be tested under § 63.645 and § 63.116(c), performance test results including the information in paragraphs (f)(1)(iii)(A) and (B) of this section. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in § 63.645 and that the test conditions are representative of current operating conditions. If the performance test is submitted electronically through the EPA's Compliance and Emissions Data Reporting Interface in accordance with § 63.655(h)(9), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the Notification of Compliance Status in lieu of the performance test results. The performance test results must be submitted to CEDRI by the date the Notification of Compliance Status is submitted.

* * * * *

(2) If initial performance tests are required by §§ 63.643 through 63.653, the Notification of Compliance Status report shall include one complete test report for each test method used for a particular source. On and after February 1, 2016, for data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results in accordance with § 63.655(h)(9) by the date that you submit the Notification of Compliance Status, and you must include the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted in the Notification of Compliance Status. All other performance test results must

be reported in the Notification of Compliance Status.

* * * * *

(4) Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status report, unless the results are required to be submitted electronically by § 63.655(h)(9). For performance evaluation results required to be submitted through CEDRI, submit the results in accordance with § 63.655(h)(9) by the date that you submit the Notification of Compliance Status and include the process unit where the CMS is installed, the parameter measured by the CMS, and the date that the performance evaluation was conducted in the Notification of Compliance Status.

* * * * *

(g) * * *

(2) * * *

(i) * * *

(B) * * *

(*1*) A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than a 10 percent open area.

* * * * *

(10) For pressure relief devices subject to the requirements § 63.648(j), Periodic Reports must include the information specified in paragraphs (g)(10)(i) through (iv) of this section.

* * * * *

(iii) For pilot-operated pressure relief devices in organic HAP service, report each pressure release to the atmosphere through the pilot vent that equals or exceeds 72 pounds of VOC per day, including duration of the pressure release through the pilot vent and estimate of the mass quantity of each organic HAP released.

* * * * *

(13) For maintenance vents subject to the requirements in § 63.643(c), Periodic Reports must include the information specified in paragraphs (g)(13)(i) through (iv) of this section for any release exceeding the applicable limits in § 63.643(c)(1). For the purposes of this reporting requirement, owners or operators complying with § 63.643(c)(1)(iv) must report each venting event for which the lower explosive limit is 20 percent or greater; owners or operators complying with § 63.643(c)(1)(v) must report each venting event conducted under those provisions and include an explanation for each event as to why utilization of this alternative was required.

* * * * *

(h) * * *

(2) * * *

(ii) In order to afford the Administrator the opportunity to have an observer present, the owner or operator of a storage vessel equipped with an external floating roof shall notify the Administrator of any seal gap measurements. The notification shall be made in writing at least 30 calendar days in advance of any gap measurements required by § 63.120(b)(1) or (2) or § 63.1063(d)(3). The State or local permitting authority can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

* * * * *

(8) For fenceline monitoring systems subject to § 63.658, each owner or operator shall submit the following information to the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) on a quarterly basis. (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The first quarterly report must be submitted once the owner or operator has obtained 12 months of data. The first quarterly report must cover the period beginning on the compliance date that is specified in Table 11 of this subpart and ending on March 31, June 30, September 30 or December 31, whichever date is the first date that occurs after the owner or operator has obtained 12 months of data (*i.e.,* the first quarterly report will contain between 12 and 15 months of data). Each subsequent quarterly report must cover one of the following reporting periods: Quarter 1 from January 1 through March 31; Quarter 2 from April 1 through June 30; Quarter 3 from July 1 through September 30; and Quarter 4 from October 1 through December 31. Each quarterly report must be electronically submitted no later than 45 calendar days following the end of the reporting period.

(i) Facility name and address.

(ii) Year and reporting quarter (*i.e.,* Quarter 1, Quarter 2, Quarter 3, or Quarter 4).

(iii) For the first reporting period and for any reporting period in which a passive monitor is added or moved, for each passive monitor: The latitude and longitude location coordinates; the sampler name; and identification of the type of sampler (*i.e.,* regular monitor, extra monitor, duplicate, field blank, inactive). The owner or operator shall determine the coordinates using an instrument with an accuracy of at least 3 meters. Coordinates shall be in decimal degrees with at least five decimal places.

(iv) The beginning and ending dates for each sampling period.

(v) Individual sample results for benzene reported in units of $\mu g/m^3$ for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as below the detection limit and reported at the method detection limit.

(vi) Data flags that indicate each monitor that was skipped for the sampling period, if the owner or operator uses an alternative sampling frequency under § 63.658(e)(3).

(vii) Data flags for each outlier determined in accordance with Section 9.2 of Method 325A of appendix A of this part. For each outlier, the owner or operator must submit the individual sample result of the outlier, as well as the evidence used to conclude that the result is an outlier.

(viii) The biweekly concentration difference (Δc) for benzene for each sampling period and the annual average Δc for benzene for each sampling period.

(9) * * *

(i) Unless otherwise specified by this subpart, within 60 days after the date of completing each performance test as required by this subpart, the owner or operator shall submit the results of the performance tests following the procedure specified in either paragraph (h)(9)(i)(A) or (B) of this section.

* * * * *

(ii) Unless otherwise specified by this subpart, within 60 days after the date of completing each CEMS performance evaluation as required by this subpart, the owner or operator must submit the results of the performance evaluation following the procedure specified in either paragraph (h)(9)(ii)(A) or (B) of this section.

* * * * *

(10)(i) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX

and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date(s) and time(s) the CDX or CEDRI were unavailable when you attempted to access it in the 5 business days prior to the submission deadline; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(ii) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this paragraph, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(i) * * *

(3) * * *

(ii) * * *

(B) Block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values; or

(C) All values that meet the set criteria for variation from previously recorded values using an automated data compression recording system.

(*1*) The automated data compression recording system shall be designed to:

(*i*) Measure the operating parameter value at least once every hour.

(*ii*) Record at least 24 values each day during periods of operation.

(*iii*) Record the date and time when monitors are turned off or on.

(*iv*) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident.

(*v*) Compute daily average values of the monitored operating parameter based on recorded data.

(*2*) You must maintain a record of the description of the monitoring system and data compression recording system including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all criteria of paragraph (i)(3)(ii)(C)(*1*) of this section.

* * * * *

(5) * * *

(i) Identification of all petroleum refinery process unit heat exchangers at the facility and the average annual HAP concentration of process fluid or intervening cooling fluid estimated when developing the Notification of Compliance Status report.

(ii) Identification of all heat exchange systems subject to the monitoring requirements in § 63.654 and identification of all heat exchange systems that are exempt from the monitoring requirements according to the provisions in § 63.654(b). For each heat exchange system that is subject to the monitoring requirements in § 63.654, this must include identification of all heat exchangers within each heat exchange system, and, for closed-loop recirculation systems, the cooling tower included in each heat exchange system.

(iii) Results of the following monitoring data for each required monitoring event:

(A) Date/time of event.

(B) Barometric pressure.

(C) El Paso air stripping apparatus water flow milliliter/minute (ml/min) and air flow, ml/min, and air temperature, °Celsius.

(D) FID reading (ppmv).

(E) Length of sampling period.

(F) Sample volume.

(G) Calibration information identified in Section 5.4.2 of the ''Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources'' Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see § 63.14).

(iv) The date when a leak was identified, the date the source of the leak was identified, and the date when the heat exchanger was repaired or taken out of service.

(v) If a repair is delayed, the reason for the delay, the schedule for completing the repair, the heat exchange exit line flow or cooling tower return line average flow rate at the monitoring location (in gallons/minute), and the estimate of potential strippable hydrocarbon emissions for each required monitoring interval during the delay of repair.

* * * * *

(7) * * *

(iii) * * *

(B) The pressure or temperature of the coke drum vessel, as applicable, for the 5-minute period prior to the pre-vent draining.

* * * * *

(11) For each pressure relief device subject to the pressure release management work practice standards in § 63.648(j)(3), the owner or operator shall keep the records specified in paragraphs (i)(11)(i) through (iii) of this section. For each pilot-operated pressure relief device subject to the

requirements at § 63.648(j)(4)(ii) or (iii), the owner or operator shall keep the records specified in paragraph (i)(11)(iv) of this section.

* * * * *

(iv) For pilot-operated pressure relief devices, general or release-specific records for estimating the quantity of VOC released from the pilot vent during a release event, and records of calculations used to determine the quantity of specific HAP released for any event or series of events in which 72 or more pounds of VOC are released in a day.

(12) For each maintenance vent opening subject to the requirements in § 63.643(c), the owner or operator shall keep the applicable records specified in paragraphs (i)(12)(i) through (vi) of this section.

* * * * *

(iv) If complying with the requirements of § 63.643(c)(1)(iii), records used to estimate the total quantity of VOC in the equipment and the type and size limits of equipment that contain less than 72 pounds of VOC at the time of maintenance vent opening. For each maintenance vent opening for which the deinventory procedures specified in paragraph (i)(12)(i) of this section are not followed or for which the equipment opened exceeds the type and size limits established in the records specified in this paragraph, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere.

* * * * *

(vi) If complying with the requirements of § 63.643(c)(1)(v), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and lower explosive limit of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening.

* * * * *

■ 11. Section 63.657 is amended by revising paragraphs (a)(1)(i) and (ii), (a)(2)(i) and (ii), (b)(5), and (e) to read as follows:

§ 63.657 Delayed coking unit decoking operation standards.

(a) * * *

(1) * * *

(i) An average vessel pressure of 2 psig or less determined on a rolling 60-event average; or

(ii) An average vessel temperature of 220 degrees Fahrenheit or less determined on a rolling 60-event average.

(2) * * *

(i) A vessel pressure of 2.0 psig or less for each decoking event; or

(ii) A vessel temperature of 218 degrees Fahrenheit or less for each decoking event.

* * * * *

(b) * * *

(5) The output of the pressure monitoring system must be reviewed each day the unit is operated to ensure that the pressure readings fluctuate as expected between operating and cooling/decoking cycles to verify the pressure taps are not plugged. Plugged pressure taps must be unplugged or otherwise repaired prior to the next operating cycle.

* * * * *

(e) The owner or operator of a delayed coking unit using the ''water overflow'' method of coke cooling prior to complying with the applicable requirements in paragraph (a) of this section must meet the requirements in either paragraph (e)(1) or (e)(2) of this section or, if applicable, the requirements in paragraph (e)(3) of this section. The owner or operator of a delayed coking unit using the ''water overflow'' method of coke cooling subject to this paragraph shall determine the coke drum vessel temperature as specified in paragraphs (c) and (d) of this section and shall not otherwise drain or vent the coke drum until the coke drum vessel temperature is at or below the applicable limits in paragraph (a)(1)(ii) or (a)(2)(ii) of this section.

(1) The overflow water must be directed to a separator or similar disengaging device that is operated in a manner to prevent entrainment of gases from the coke drum vessel to the overflow water storage tank. Gases from the separator or disengaging device must be routed to a closed blowdown system or otherwise controlled following the requirements for a Group 1 miscellaneous process vent. The liquid from the separator or disengaging device must be hardpiped to the overflow water storage tank or similarly transported to prevent exposure of the overflow water to the atmosphere. The overflow water storage tank may be an open or uncontrolled fixed-roof tank provided that a submerged fill pipe (pipe outlet below existing liquid level in the tank) is used to transfer overflow water to the tank.

(2) The overflow water must be directed to a storage vessel meeting the requirements for storage vessels in subpart SS of this part.

(3) Prior to November 26, 2020, if the equipment needed to comply with paragraphs (e)(1) or (2) of this section are not installed and operational, you must comply with all of the requirements in paragraphs (e)(3)(i) through (iv) of this section.

(i) The temperature of the coke drum, measured according to paragraph (c) of this section, must be 250 degrees Fahrenheit or less prior to initiation of water overflow and at all times during the water overflow.

(ii) The overflow water must be hardpiped to the overflow water storage tank or similarly transported to prevent exposure of the overflow water to the atmosphere.

(iii) The overflow water storage tank may be an open or uncontrolled fixed-roof tank provided that all of the following requirements are met.

(A) A submerged fill pipe (pipe outlet below existing liquid level in the tank) is used to transfer overflow water to the tank.

(B) The liquid level in the storage tank is at least 6 feet above the submerged fill pipe outlet at all times during water overflow.

(C) The temperature of the contents in the storage tank remain below 150 degrees Fahrenheit at all times during water overflow.

* * * * *

■ 12. Section 63.658 is amended by revising paragraphs (c)(1), (2) and (3), (d)(1) introductory text and (d)(2), (e) introductory text, (e)(3)(iv), (f)(1)(i) introductory text, and (f)(1)(i)(B) to read as follows:

§ 63.658 Fenceline monitoring provisions.

* * * * *

(c) * * *

(1) As it pertains to this subpart, known sources of VOCs, as used in Section 8.2.1.3 in Method 325A of appendix A of this part for siting passive monitors, means a wastewater

treatment unit, process unit, or any emission source requiring control according to the requirements of this subpart, including marine vessel loading operations. For marine vessel loading operations, one passive monitor should be sited on the shoreline adjacent to the dock. For this subpart, an additional monitor is not required if the only emission sources within 50 meters of the monitoring boundary are equipment leak sources satisfying all of the conditions in paragraphs (c)(1)(i) through (iv) of this section.

(i) The equipment leak sources in organic HAP service within 50 meters of the monitoring boundary are limited to valves, pumps, connectors, sampling connections, and open-ended lines. If compressors, pressure relief devices, or agitators in organic HAP service are present within 50 meters of the monitoring boundary, the additional passive monitoring location specified in Section 8.2.1.3 in Method 325A of appendix A of this part must be used.

(ii) All equipment leak sources in gas or light liquid service (and in organic HAP service), including valves, pumps, connectors, sampling connections and open-ended lines, must be monitored using EPA Method 21 of 40 CFR part 60, appendix A–7 no less frequently than quarterly with no provisions for skip period monitoring, or according to the provisions of § 63.11(c) Alternative Work practice for monitoring equipment for leaks. For the purpose of this provision, a leak is detected if the instrument reading equals or exceeds the applicable limits in paragraphs (c)(1)(ii)(A) through (E) of this section:

(A) For valves, pumps or connectors at an existing source, an instrument reading of 10,000 ppmv.

(B) For valves or connectors at a new source, an instrument reading of 500 ppmv.

(C) For pumps at a new source, an instrument reading of 2,000 ppmv.

(D) For sampling connections or open-ended lines, an instrument reading of 500 ppmv above background.

(E) For equipment monitored according to the Alternative Work practice for monitoring equipment for leaks, the leak definitions contained in § 63.11 (c)(6)(i) through (iii).

(iii) All equipment leak sources in organic HAP service, including sources in gas, light liquid and heavy liquid service, must be inspected using visual, audible, olfactory, or any other detection method at least monthly. A leak is detected if the inspection identifies a potential leak to the atmosphere or if there are indications of liquids dripping.

(iv) All leaks identified by the monitoring or inspections specified in paragraphs (c)(1)(ii) or (iii) of this section must be repaired no later than 15 calendar days after it is detected with no provisions for delay of repair. If a repair is not completed within 15 calendar days, the additional passive monitor specified in Section 8.2.1.3 in Method 325A of appendix A of this part must be used.

(2) The owner or operator may collect one or more background samples if the owner or operator believes that an offsite upwind source or an onsite source excluded under § 63.640(g) may influence the sampler measurements. If the owner or operator elects to collect one or more background samples, the owner or operator must develop and submit a site-specific monitoring plan for approval according to the requirements in paragraph (i) of this section. Upon approval of the site-specific monitoring plan, the background sampler(s) should be operated co-currently with the routine samplers.

(3) If there are 19 or fewer monitoring locations, the owner or operator shall collect at least one co-located duplicate sample per sampling period and at least one field blank per sampling period. If there are 20 or more monitoring locations, the owner or operator shall collect at least two co-located duplicate samples per sampling period and at least one field blank per sampling period. The co-located duplicates may be collected at any of the perimeter sampling locations.

* * * * *

(d) * * *

(1) If a near-field source correction is used as provided in paragraph (i)(2) of this section or if an alternative test method is used that provides time-resolved measurements, the owner or operator shall:

* * * * *

(2) For cases other than those specified in paragraph (d)(1) of this section, the owner or operator shall collect and record sampling period average temperature and barometric pressure using either an on-site meteorological station in accordance with Section 8.3.1 through 8.3.3 of Method 325A of appendix A of this part or, alternatively, using data from a United States Weather Service (USWS) meteorological station provided the USWS meteorological station is within 40 kilometers (25 miles) of the refinery.

* * * * *

(e) The owner or operator shall use a sampling period and sampling frequency as specified in paragraphs (e)(1) through (3) of this section.

* * * * *

(3) * * *

(iv) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (e)(3)(iii) of this section is at or below 0.9 $\mu g/m^3$ for 2 years (*i.e.,* 4 consecutive semiannual samples), only one sample per year is required for that monitoring site. For yearly sampling, samples shall occur at least 10 months but no more than 14 months apart.

* * * * *

(f) * * *

(1) * * *

(i) Except when near-field source correction is used as provided in paragraph (i) of this section, the owner or operator shall determine the highest and lowest sample results for benzene concentrations from the sample pool and calculate Δc as the difference in these concentrations. Co-located samples must be averaged together for the purposes of determining the benzene concentration for that sampling location, and, if applicable, for determining Δc. The owner or operator shall adhere to the following procedures when one or more samples for the sampling period are below the method detection limit for benzene:

* * * * *

(B) If all sample results are below the method detection limit, the owner or operator shall use the method detection limit as the highest sample result and zero as the lowest sample result when calculating Δc.

* * * * *

■ 13. Section 63.660 is amended by revising the introductory text, paragraph (b) introductory text, paragraphs (b)(1) and (e), and paragraph (i)(2) introductory text, and adding paragraph (i)(2)(iii) to read as follows:

§ 63.660 Storage vessel provisions.

On and after the applicable compliance date for a Group 1 storage vessel located at a new or existing source as specified in § 63.640(h), the owner or operator of a Group 1 storage vessel storing liquid with a maximum true vapor pressure less than 76.6 kilopascals (11.1 pounds per square inch) that is part of a new or existing source shall comply with either the requirements in subpart WW or SS of this part according to the requirements in paragraphs (a) through (i) of this section and the owner or operator of a Group 1 storage vessel storing liquid with a maximum true vapor pressure greater than or equal to 76.6 kilopascals (11.1 pounds per square inch) that is

part of a new or existing source shall comply with the requirements in subpart SS of this part according to the requirements in paragraphs (a) through (i) of this section.

* * * * *

(b) A floating roof storage vessel complying with the requirements of subpart WW of this part may comply with the control option specified in paragraph (b)(1) of this section and, if equipped with a ladder having at least one slotted leg, shall comply with one of the control options as described in paragraph (b)(2) of this section. If the floating roof storage vessel does not meet the requirements of § 63.1063(a)(2)(i) through (a)(2)(viii) as of June 30, 2014, these requirements do not apply until the next time the vessel is completely emptied and degassed, or January 30, 2026, whichever occurs first.

(1) In addition to the options presented in §§ 63.1063(a)(2)(viii)(A) and (B) and 63.1064, a floating roof storage vessel may comply with § 63.1063(a)(2)(viii) using a flexible enclosure device and either a gasketed or welded cap on the top of the guidepole.

* * * * *

(e) For storage vessels previously subject to requirements in § 63.646, initial inspection requirements in § 63.1063(c)(1) and (c)(2)(i) (*i.e.,* those related to the initial filling of the storage vessel) or in § 63.983(b)(1)(i)(A), as applicable, are not required. Failure to perform other inspections and monitoring required by this section shall constitute a violation of the applicable standard of this subpart.

* * * * *

(i) * * *

(2) If a closed vent system contains a bypass line, the owner or operator shall comply with the provisions of either § 63.983(a)(3)(i) or (ii) or paragraph (iii) of this section for each closed vent system that contains bypass lines that could divert a vent stream either directly to the atmosphere or to a control device that does not comply with the requirements in subpart SS of this part. Except as provided in paragraphs (i)(2)(i) and (ii) of this section, use of the bypass at any time to divert a Group 1 storage vessel either directly to the atmosphere or to a control device that does not comply with the requirements in subpart SS of this part is an emissions standards violation. Equipment such as low leg drains and equipment subject to § 63.648 are not subject to this paragraph (i)(2).

* * * * *

(iii) Use a cap, blind flange, plug, or a second valve for an open-ended valves or line following the requirements specified in § 60.482–6(a)(2), (b) and (c).

* * * * *

■ 14. Section 63.670 is amended by:
■ a. Revising paragraph (f);
■ b. Revising paragraphs (h) introductory text, (h)(1), and (i) introductory text;
■ c. Adding paragraphs (i)(5) and (6);
■ d. Revising paragraph (j)(6) introductory text;
■ e. Revising the definition of the Q_{cum} term in the equation in paragraph (k)(3);
■ f. Revising paragraph (m)(2) introductory text;
■ g. Revising the definitions of the Q_{NG2}, Q_{NG1}, and NHV_{NG} terms in the equation in paragraph (m)(2);
■ h. Revising paragraph (n)(2) introductory text;
■ i. Revising the definitions of the Q_{NG2}, Q_{NG1}, and NHV_{NG} terms in the equation in paragraph (n)(2); and
■ j. Revising paragraphs (o) introductory text, (o)(1)(ii)(B), (o)(1)(iii)(B), and (o)(3)(i).

The revisions and additions read as follows:

§ 63.670 Requirements for flare control devices.

* * * * *

(f) *Dilution operating limits for flares with perimeter assist air.* Except as provided in paragraph (f)(1) of this section, for each flare actively receiving perimeter assist air, the owner or operator shall operate the flare to maintain the net heating value dilution parameter (NHVdil) at or above 22 British thermal units per square foot (Btu/ft^2) determined on a 15-minute block period basis when regulated material is being routed to the flare for at least 15-minutes. The owner or operator shall monitor and calculate NHV_{dil} as specified in paragraph (n) of this section.

(1) If the only assist air provided to a specific flare is perimeter assist air intentionally entrained in lower and/or upper steam at the flare tip and the effective diameter is 9 inches or greater, the owner or operator shall comply only with the NHV_{cz} operating limit in paragraph (e) of this section for that flare.

(2) [Reserved]

* * * * *

(h) *Visible emissions monitoring.* The owner or operator shall conduct an initial visible emissions demonstration using an observation period of 2 hours using Method 22 at 40 CFR part 60, appendix A–7. The initial visible emissions demonstration should be conducted the first time regulated materials are routed to the flare. Subsequent visible emissions observations must be conducted using either the methods in paragraph (h)(1) of this section or, alternatively, the methods in paragraph (h)(2) of this section. The owner or operator must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in § 63.655(g)(11)(ii).

(1) At least once per day for each day regulated material is routed to the flare, conduct visible emissions observations using an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A–7. If at any time the owner or operator sees visible emissions while regulated material is routed to the flare, even if the minimum required daily visible emission monitoring has already been performed, the owner or operator shall immediately begin an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A–7. If visible emissions are observed for more than one continuous minute during any 5-minute observation period, the observation period using Method 22 at 40 CFR part 60, appendix A–7 must be extended to 2 hours or until 5-minutes of visible emissions are observed. Daily 5-minute Method 22 observations are not required to be conducted for days the flare does not receive any regulated material.

* * * * *

(i) *Flare vent gas, steam assist and air assist flow rate monitoring.* The owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate in the flare header or headers that feed the flare as well as any flare supplemental gas used. Different flow monitoring methods may be used to measure different gaseous streams that make up the flare vent gas provided that the flow rates of all gas streams that contribute to the flare vent gas are determined. If assist air or assist steam is used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate of assist air and/or assist steam used with the flare. If pre-mix assist air and perimeter assist are both used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of separately measuring, calculating, and recording the volumetric flow rate of premix assist air and perimeter assist air used with the

flare. Flow monitoring system requirements and acceptable alternatives are provided in paragraphs (i)(1) through (6) of this section.

* * * * *

(5) Continuously monitoring fan speed or power and using fan curves is an acceptable method for continuously monitoring assist air flow rates.

(6) For perimeter assist air intentionally entrained in lower and/or upper steam, the monitored steam flow rate and the maximum design air-to-steam volumetric flow ratio of the entrainment system may be used to determine the assist air flow rate.

(j) * * *

(6) Direct compositional or net heating value monitoring is not required for gas streams that have been demonstrated to have consistent composition (or a fixed minimum net heating value) according to the methods in paragraphs (j)(6)(i) through (iii) of this section.

* * * * *

(k) * * *

(3) * * *

* * * * *

Q_{cum} = Cumulative volumetric flow over 15-minute block average period, standard cubic feet.

* * * * *

(m) * * *

(2) Owners or operators of flares that use the feed-forward calculation methodology in paragraph (l)(5)(i) of this section and that monitor gas composition or net heating value in a location representative of the cumulative vent gas stream and that directly monitor flare supplemental gas flow additions to the flare must determine the 15-minute block average NHV_{cz} using the following equation.

* * * * *

Q_{NG2} = Cumulative volumetric flow of flare supplemental gas during the 15-minute block period, scf.

Q_{NG1} = Cumulative volumetric flow of flare supplemental gas during the previous 15-minute block period, scf. For the first 15-minute block period of an event, use the volumetric flow value for the current 15-minute block period, *i.e.,* $Q_{NG1} = Q_{NG2}$.

NHV_{NG} = Net heating value of flare supplemental gas for the 15-minute block period determined according to the requirements in paragraph (j)(5) of this section, Btu/scf.

* * * * *

(n) * * *

(2) Owners or operators of flares that use the feed-forward calculation methodology in paragraph (l)(5)(i) of this section and that monitor gas composition or net heating value in a location representative of the cumulative vent gas stream and that directly monitor flare supplemental gas flow additions to the flare must determine the 15-minute block average NHV_{dil} using the following equation only during periods when perimeter assist air is used. For 15-minute block periods when there is no cumulative volumetric flow of perimeter assist air, the 15-minute block average NHV_{dil} parameter does not need to be calculated.

* * * * *

Q_{NG2} = Cumulative volumetric flow of flare supplemental gas during the 15-minute block period, scf.

Q_{NG1} = Cumulative volumetric flow of flare supplemental gas during the previous 15-minute block period, scf. For the first 15-minute block period of an event, use the volumetric flow value for the current 15-minute block period, *i.e.,* $Q_{NG1} = Q_{NG2}$.

NHV_{NG} = Net heating value of flare supplemental gas for the 15-minute block period determined according to the requirements in paragraph (j)(5) of this section, Btu/scf.

* * * * *

(o) *Emergency flaring provisions.* The owner or operator of a flare that has the potential to operate above its smokeless capacity under any circumstance shall comply with the provisions in paragraphs (o)(1) through (7) of this section.

(1) * * *

(ii) * * *

(B) Implementation of prevention measures listed for pressure relief devices in § 63.648(j)(3)(ii)(A) through (E) for each pressure relief device that can discharge to the flare.

* * * * *

(iii) * * *

(B) The smokeless capacity of the flare based on a 15-minute block average and design conditions. *Note:* A single value must be provided for the smokeless capacity of the flare.

* * * * *

(3) * * *

(i) The vent gas flow rate exceeds the smokeless capacity of the flare based on a 15-minute block average and visible emissions are present from the flare for more than 5 minutes during any 2 consecutive hours during the release event.

* * * * *

■ 15. Table 6 to Subpart CC is amended by revising the entries ''63.6(f)(3)'', ''63.6(h)(8)'', 63.7(a)(2)'', ''63.7(f)'', ''63.7(h)(3)'', and ''63.8(e)'' to read as follows:

TABLE 6—GENERAL PROVISIONS APPLICABILITY TO SUBPART CC [a]

Reference	Applies to subpart CC	Comment
*	*	* * * * * *
63.6(f)(3)	Yes	Except the cross-references to § 63.6(f)(1) and (e)(1)(i) are changed to § 63.642(n) and performance test results may be written or electronic.
*	*	* * * * * *
63.6(h)(8)	Yes	Except performance test results may be written or electronic.
*	*	* * * * * *
63.7(a)(2)	Yes	Except test results must be submitted in the Notification of Compliance Status report due 150 days after compliance date, as specified in § 63.655(f), unless they are required to be submitted electronically in accordance with § 63.655(h)(9). Test results required to be submitted electronically must be submitted by the date the Notification of Compliance Status report is submitted.
*	*	* * * * * *
63.7(f)	Yes	Except that additional notification or approval is not required for alternatives directly specified in Subpart CC.

TABLE 6—GENERAL PROVISIONS APPLICABILITY TO SUBPART CC [a]—Continued

Reference	Applies to subpart CC	Comment
*	*	* * * * * *
63.7(h)(3)	Yes	Yes, except site-specific test plans shall not be required, and where § 63.7(h)(3)(i) specifies waiver submittal date, the date shall be 90 days prior to the Notification of Compliance Status report in § 63.655(f).
*	*	* * * * * *
63.8(e)	Yes	Except that results are to be submitted electronically if required by § 63.655(h)(9).
*	*	* * * * * *

■ 16. Table 11 to subpart CC is amended by revising items (2)(iv), (3)(iv) and (4)(v) to read as follows:

TABLE 11—COMPLIANCE DATES AND REQUIREMENTS

If the construction/ reconstruction date is . . .	Then the owner or operator must comply with . . .	And the owner or operator must achieve compliance . . .	Except as provided in . . .
*	* * *	* *	* *
(2) * * *	(iv) Requirements for existing sources in § 63.643(c).	On or before December 26, 2018	§§ 63.640(k), (l) and (m) and 63.643(d).
*	* * *	* *	* *
(3) * * *	(iv) Requirements for existing sources in § 63.643(c).	On or before December 26, 2018	§§ 63.640(k), (l) and (m) and 63.643(d).
*	* * *	* *	* *
(4) * * *	(v) Requirements for existing sources in § 63.643(c).	On or before December 26, 2018	§§ 63.640(k), (l) and (m) and 63.643(d).
*	* * *	* *	* *

■ 17. Table 13 to Subpart CC is amended by revising the entry ''Hydrogen analyzer'' to read as follows:

TABLE 13—CALIBRATION AND QUALITY CONTROL REQUIREMENTS FOR CPMS

Parameter	Minimum accuracy requirements	Calibration requirements
*	* *	* * * *
Hydrogen analyzer	±2 percent over the concentration measured or 0.1 volume percent, whichever is greater.	Specify calibration requirements in your site specific CPMS monitoring plan. Calibration requirements should follow manufacturer's recommendations at a minimum. Where feasible, select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air inleakages, or other point at which a change in the pollutant concentration occurs.

Subpart UUU—National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

■ 18. Section 63.1564 is amended by revising the introductory text of paragraphs (b)(4)(iii), (c)(3), and (c)(4) and revising paragraph (c)(5)(iii) to read as follows:

§ 63.1564 What are my requirements for metal HAP emissions from catalytic cracking units?

* * * * *

(b) * * *

(4) * * *

(iii) If you elect Option 3 in paragraph (a)(1)(v) of this section, the Ni lb/hr emission limit, compute your Ni emission rate using Equation 5 of this section and your site-specific Ni operating limit (if you use a continuous opacity monitoring system) using Equations 6 and 7 of this section as follows:

* * * * *

(c) * * *

(3) If you use a continuous opacity monitoring system and elect to comply with Option 3 in paragraph (a)(1)(v) of this section, determine continuous compliance with your site-specific Ni

operating limit by using Equation 11 of this section as follows:

* * * * *

(4) If you use a continuous opacity monitoring system and elect to comply with Option 4 in paragraph (a)(1)(vi) of this section, determine continuous compliance with your site-specific Ni operating limit by using Equation 12 of this section as follows:

* * * * *

(5) * * *

(iii) Calculating the inlet velocity to the primary internal cyclones in feet per second (ft/sec) by dividing the average volumetric flow rate (acfm) by the cumulative cross-sectional area of the primary internal cyclone inlets (ft^2) and by 60 seconds/minute (for unit conversion).

* * * * *

■ 19. Section 63.1565 is amended by revising paragraph (a)(5)(ii) to read as follows:

§ 63.1565 What are my requirements for organic HAP emissions from catalytic cracking units?

(a) * * *

(5) * * *

(ii) You can elect to maintain the oxygen (O_2) concentration in the exhaust gas from your catalyst regenerator at or above 1 volume percent (dry basis) or 1 volume percent (wet basis with no moisture correction).

* * * * *

■ 20. Section 63.1569 is amended by revising paragraph (c)(2) to read as follows:

§ 63.1569 What are my requirements for HAP emissions from bypass lines?

* * * * *

(c) * * *

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

■ 21. Section 63.1571 is amended by revising the introductory text of paragraphs (a), (a)(5) and (a)(6), and by revising the introductory text of paragraphs (d)(1) and (d)(2) to read as follows:

§ 63.1571 How and when do I conduct a performance test or other initial compliance demonstration?

(a) *When must I conduct a performance test?* You must conduct initial performance tests and report the results by no later than 150 days after the compliance date specified for your source in § 63.1563 and according to the provisions in § 63.7(a)(2) and § 63.1574(a)(3). If you are required to do a performance evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, you may do them at the first regeneration cycle after your compliance date and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test. You must conduct additional performance tests as specified in paragraphs (a)(5) and (6) of this section and report the results of these performance tests according to the provisions in § 63.1575(f).

* * * * *

(5) *Periodic performance testing for PM or Ni.* Except as provided in paragraphs (a)(5)(i) and (ii) of this section, conduct a periodic performance test for PM or Ni for each catalytic cracking unit at least once every 5 years according to the requirements in Table 4 of this subpart. You must conduct the first periodic performance test no later than August 1, 2017 or within 150 days of startup of a new unit.

* * * * *

(6) *One-time performance testing for Hydrogen Cyanide (HCN).* Conduct a performance test for HCN from each catalytic cracking unit no later than August 1, 2017 or within 150 days of startup of a new unit according to the applicable requirements in paragraphs (a)(6)(i) and (ii) of this section.

* * * * *

(d) * * *

(1) If you must meet the HAP metal emission limitations in § 63.1564, you elect the option in paragraph (a)(1)(v) in § 63.1564 (Ni lb/hr), and you use continuous parameter monitoring systems, you must establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. Section 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 1 of this section as follows:

* * * * *

(2) If you must meet the HAP metal emission limitations in § 63.1564, you elect the option in paragraph (a)(1)(vi) in § 63.1564 (Ni per coke burn-off), and you use continuous parameter monitoring systems, you must establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. Section 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 2 of this section as follows:

* * * * *

■ 22. Section 63.1572 is amended by revising paragraphs (c)(1) and (d)(1) to read as follows:

§ 63.1572 What are my monitoring installation, operation, and maintenance requirements?

* * * * *

(c) * * *

(1) You must install, operate, and maintain each continuous parameter monitoring system according to the requirements in Table 41 of this subpart. You must also meet the equipment specifications in Table 41 of this subpart if pH strips or colormetric tube sampling systems are used. You must meet the requirements in Table 41 of this subpart for BLD systems. Alternatively, before August 1, 2017, you may install, operate, and maintain each continuous parameter monitoring system in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

* * * * *

(d) * * *

(1) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected source is operating.

* * * * *

■ 23. Section 63.1573 is amended by revising paragraph (a)(1) introductory text to read as follows:

§ 63.1573 What are my monitoring alternatives?

(a) * * * (1) You may use this alternative to a continuous parameter monitoring system for the catalytic regenerator exhaust gas flow rate for your catalytic cracking unit if the unit does not introduce any other gas streams into the catalyst regeneration vent (*i.e.,* complete combustion units with no additional combustion devices). You may also use this alternative to a continuous parameter monitoring system for the catalytic regenerator atmospheric exhaust gas flow rate for your catalytic reforming unit during the coke burn and rejuvenation cycles if the unit operates as a constant pressure system during these cycles. You may

also use this alternative to a continuous parameter monitoring system for the gas flow rate exiting the catalyst regenerator to determine inlet velocity to the primary internal cyclones as required in § 63.1564(c)(5) regardless of the configuration of the catalytic regenerator exhaust vent downstream of the regenerator (*i.e.,* regardless of whether or not any other gas streams are introduced into the catalyst regeneration vent). Except, if you only use this alternative to demonstrate compliance with § 63.1564(c)(5), you shall use this procedure for the performance test and for monitoring after the performance test. You shall:

* * * * *

■ 24. Section 63.1574 is amended by revising paragraph (a)(3)(ii) to read as follows:

§ 63.1574 What notifications must I submit and when?

(a) * * *

(3) * * *

(ii) For each initial compliance demonstration that includes a performance test, you must submit the notification of compliance status no later than 150 calendar days after the compliance date specified for your affected source in § 63.1563. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results in accordance with § 63.1575(k)(1)(i) by the date that you submit the Notification of Compliance Status, and you must include the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted in the Notification of Compliance Status. For performance evaluations of continuous monitoring systems (CMS) measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results in accordance with § 63.1575(k)(2)(i) by the date that you submit the Notification of Compliance Status, and you must include the process unit where the CMS is installed, the parameter measured by the CMS, and the date that the performance evaluation was conducted in the Notification of Compliance Status. All other performance test and performance evaluation results (*i.e.,* those not supported by EPA's ERT) must be reported in the Notification of Compliance Status.

* * * * *

■ 25. Section 63.1575 is amended by:

■ a. Revising paragraphs (f)(1), (k)(1) introductory text and (k)(2) introductory text; and

■ b. Adding paragraph (l).

The revisions and additions read as follows:

§ 63.1575 What reports must I submit and when?

* * * * *

(f) * * *

(1) A copy of any performance test or performance evaluation of a CMS done during the reporting period on any affected unit, if applicable. The report must be included in the next semiannual compliance report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, you must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results in accordance with paragraph (k)(1)(i) of this section by the date that you submit the compliance report, and instead of including a copy of the test report in the compliance report, you must include the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted in the compliance report. For performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results in accordance with paragraph (k)(2)(i) of this section by the date that you submit the compliance report, and you must include the process unit where the CMS is installed, the parameter measured by the CMS, and the date that the performance evaluation was conducted in the compliance report. All other performance test and performance evaluation results (*i.e.,* those not supported by EPA's ERT) must be reported in the compliance report.

* * * * *

(k) * * *

(1) Unless otherwise specified by this subpart, within 60 days after the date of completing each performance test as required by this subpart, you must submit the results of the performance tests following the procedure specified in either paragraph (k)(1)(i) or (ii) of this section.

* * * * *

(2) Unless otherwise specified by this subpart, within 60 days after the date of completing each CEMS performance evaluation required by § 63.1571(a) and (b), you must submit the results of the performance evaluation following the procedure specified in either paragraph (k)(2)(i) or (ii) of this section.

* * * * *

(l) *Extensions to electronic reporting deadlines.* (1) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date(s) and time(s) the CDX or CEDRI were unavailable when you attempted to access it in the 5 business days prior to the submission deadline; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the

claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(2) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

■ 26. Section 63.1576 is amended by revising paragraph (a)(2)(i) to read as follows:

§ 63.1576 What records must I keep, in what form, and for how long?

(a) * * *

(2) * * *

(i) Record the date, time, and duration of each startup and/or shutdown period for which the facility elected to comply with the alternative standards in § 63.1564(a)(5)(ii) or § 63.1565(a)(5)(ii) or § 63.1568(a)(4)(ii) or (iii).

* * * * *

■ 27. Table 3 to Subpart UUU is amended by revising the table heading and entries for items 2.c, 6, 7, 8 and 9 to read as follows:

TABLE 3 TO SUBPART UUU OF PART 63—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

For each new or existing catalytic cracking unit . . .	If you use this type of control device for your vent . . .	You shall install, operate, and maintain a . . .
2. * * *		
	c. Wet scrubber	Continuous parameter monitoring system to measure and record the pressure drop across the scrubber,[2] the gas flow rate entering or exiting the control device,[1] and total liquid (or scrubbing liquor) flow rate to the control device.
6. Option 1a: Elect NSPS subpart J, PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR 60.102 or 60.102a(b)(1).	Any	See item 1 of this table.
7. Option 1b: Elect NSPS subpart Ja, PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR 60.102 or 60.102a(b)(1).	Any	The applicable continuous monitoring systems in item 2 of this table.
8. Option 1c: Elect NSPS subpart Ja, PM concentration limit not subject to the NSPS for PM in 40 CFR 60.102 or 60.102a(b)(1).	Any	See item 3 of this table.
9. Option 2: PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR 60.102 or 60.102a(b)(1).	Any	The applicable continuous monitoring systems in item 2 of this table.

[1] If applicable, you can use the alternative in § 63.1573(a)(1) instead of a continuous parameter monitoring system for gas flow rate.

[2] If you use a jet ejector type wet scrubber or other type of wet scrubber equipped with atomizing spray nozzles, you can use the alternative in § 63.1573(b) instead of a continuous parameter monitoring system for pressure drop across the scrubber.

■ 28. Table 4 to Subpart UUU of Part 63 is amended by revising the entries for items 9.c and 10.c to read as follows:

* * * * *

TABLE 4 TO SUBPART UUU OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

*	*	*	*	*	*	*
For each new or existing catalytic cracking unit catalyst regenerator vent . . .	You must . . .	Using . . .	According to these requirements . . .			
*	*	*	*	*	*	*
9. * * *						
	c. Determine the equilibrium catalyst Ni concentration.	XRF procedure in appendix A to this subpart 1; or EPA Method 6010B or 6020 or EPA Method 7520 or 7521 in SW–8462; or an alternative to the SW–846 method satisfactory to the Administrator.	You must obtain 1 sample for each of the 3 test runs; determine and record the equilibrium catalyst Ni concentration for each of the 3 samples; and you may adjust the laboratory results to the maximum value using Equation 1 of § 63.1571, if applicable.			
*	*	*	*	*	*	*
10. * * *						
	c. Determine the equilibrium catalyst Ni concentration.	See item 9.c. of this table	You must obtain 1 sample for each of the 3 test runs; determine and record the equilibrium catalyst Ni concentration for each of the 3 samples; and you may adjust the laboratory results to the maximum value using Equation 2 of § 63.1571, if applicable.			
*	*	*	*	*	*	*

* * * * *

■ 29. Table 5 to Subpart UUU is amended by revising the entry for item 3 to read as follows:

TABLE 5 TO SUBPART UUU OF PART 63—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

*	*	*	*	*	*	*
For each new and existing catalytic cracking unit . . .	For the following emission limit . . .	You have demonstrated compliance if . . .				
*	*	*	*	*	*	*
3. Subject to NSPS for PM in 40 CFR 60.102a(b)(1)(ii), electing to meet the PM per coke burn-off limit.	PM emissions must not exceed 0.5 g/kg (0.5 lb PM/1,000 lb) of coke burn-off).	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 0.5 g/kg (0.5 lb/1,000 lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you must certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. As part of your Notification of Compliance Status, you certify that your BLD; CO_2, O_2, or CO monitor; or continuous opacity monitoring system meets the requirements in § 63.1572.				
*	*	*	*	*	*	*

■ 30. Table 6 to Subpart UUU is amended by revising the entries for items 1.a.ii and 7 to read as follows:

TABLE 6 TO SUBPART UUU OF PART 63—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

For each new and existing catalytic cracking unit . . .	Subject to this emission limit for your catalyst regenerator vent . . .	You shall demonstrate continuous compliance by . . .
1. * * *	a. * * *.	ii. Conducting a performance test before August 1, 2017 or within 150 days of startup of a new unit and thereafter following the testing frequency in § 63.1571(a)(5) as applicable to your unit.
7. Option 1b: Elect NSPS subpart Ja requirements for PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR 60.102 or 60.102a(b)(1).	PM emissions must not exceed 1.0 g/kg (1.0 lb PM/1,000 lb) of coke burn-off.	See item 2 of this table.

■ 31. Table 10 to Subpart UUU is amended by revising the entry for item 3 to read as follows:

TABLE 10 TO SUBPART UUU OF PART 63—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

For each new or existing catalytic cracking unit . . .	And you use this type of control device for your vent . . .	You shall install, operate, and maintain this type of continuous monitoring system . . .
3. During periods of startup, shutdown or hot standby electing to comply with the operating limit in § 63.1565(a)(5)(ii).	Any	Continuous parameter monitoring system to measure and record the concentration by volume (wet or dry basis) of oxygen from each catalyst regenerator vent. If measurement is made on a wet basis, you must comply with the limit as measured (no moisture correction).

■ 32. Table 43 to Subpart UUU is amended by revising the entry for item 2 to read as follows:

TABLE 43 TO SUBPART UUU OF PART 63—REQUIREMENTS FOR REPORTS

You must submit . . .	The report must contain . . .	You shall submit the report . . .
2. Performance test and CEMS performance evaluation data.	On and after February 1, 2016, the information specified in § 63.1575(k)(1).	Semiannually according to the requirements in § 63.1575(b) and (f).

■ 33. Table 44 to Subpart UUU is amended by revising the entries ''63.6(f)(3)'', ''63.6(h)(7)(i)'', ''63.6(h)(8)'', ''63.7(a)(2)'', ''63.7(g)'', ''63.8(e)'', ''63.10(d)(2)'', ''63.10(e)(1)–(2)'', and ''63.10(e)(4)'' to read as follows:

TABLE 44 TO SUBPART UUU OF PART 63—APPLICABILITY OF NESHAP GENERAL PROVISIONS TO SUBPART UUU

* * * * * * *

Citation	Subject	Applies to subpart UUU	Explanation
*	*	*	* * * *
§ 63.6(f)(3)		Yes	Except the cross-references to § 63.6(f)(1) and (e)(1)(i) are changed to § 63.1570(c) and this subpart specifies how and when the performance test results are reported.
*	*	*	* * * *
§ 63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test.	Yes	Except this subpart specifies how and when the performance test results are reported.
*	*	*	* * * *
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards.	Yes	Except this subpart specifies how and when the performance test results are reported.
*	*	*	* * * *
§ 63.7(a)(2)	Performance Test Dates	Yes	Except this subpart specifies that the results of initial performance tests must be submitted within 150 days after the compliance date.
*	*	*	* * * *
§ 63.7(g)	Data Analysis, Recordkeeping, Reporting.	Yes	Except this subpart specifies how and when the performance test or performance evaluation results are reported and § 63.7(g)(2) is reserved and does not apply.
*	*	*	* * * *
§ 63.8(e)	CMS Performance Evaluation	Yes	Except this subpart specifies how and when the performance evaluation results are reported.
*	*	*	* * * *
§ 63.10(d)(2)	Performance Test Results	No	This subpart specifies how and when the performance test results are reported.
*	*	*	* * * *
§ 63.10(e)(1)–(2)	Additional CMS Reports	Yes	Except this subpart specifies how and when the performance evaluation results are reported.
*	*	*	* * * *
§ 63.10(e)(4)	COMS Data Reports	Yes	Except this subpart specifies how and when the performance test results are reported.
*	*	*	* * * *

[FR Doc. 2018–25080 Filed 11–23–18; 8:45 am]

BILLING CODE 6560–50–P

year, the Judges shall adjust the royalty fee payable under Section 119(b)(1)(B) ''to reflect any changes occurring in the cost of living as determined by the most recent Consumer Price Index (for all consumers and for all items) [CPI–U] published by the Secretary of Labor before December 1 of the preceding year.'' Section 119 also requires that ''[n]otification of the adjusted fees shall be published in the **Federal Register** at least 25 days before January 1.'' 17 U.S.C. 119(c)(2).

The change in the cost of living as determined by the CPI–U during the period from the most recent index published before December 1, 2017, to the most recent index published before December 1, 2018, is 2.5%.[2] Application of the 2.5% COLA to the current rate for the secondary transmission of broadcast stations by satellite carriers for private home viewing—28 cents per subscriber per month—results in a rate of 29 cents per subscriber per month (rounded to the nearest cent). *See* 37 CFR 386.2(b)(1). Application of the 2.5% COLA to the current rate for viewing in commercial establishments—58 cents per subscriber per month—results in a rate of 59 cents per subscriber per month (rounded to the nearest cent). *See* 37 CFR 386.2(b)(2).

List of Subjects in 37 CFR Part 386

Copyright, Satellite, Television.

Final Regulations

In consideration of the foregoing, the Judges amend part 386 of title 37 of the Code of Federal Regulations as follows:

PART 386—ADJUSTMENT OF ROYALTY FEES FOR SECONDARY TRANSMISSIONS BY SATELLITE CARRIERS

■ 1. The authority citation for part 386 continues to read as follows:

Authority: 17 U.S.C. 119(c), 801(b)(1).

■ 2. Section 386.2 is amended by adding paragraphs (b)(1)(x) and (b)(2)(x) to read as follows:

§ 386.2 Royalty fee for secondary transmission by satellite carriers.

* * * * *

(b) * * *

(1) * * *

(x) 2019: 29 cents per subscriber per month.

(2) * * *

(x) 2019: 59 cents per subscriber per month.

Suzanne M. Barnett,

Chief Copyright Royalty Judge.

[FR Doc. 2018–25907 Filed 11–27–18; 8:45 am]

BILLING CODE 1410–72–P

[2] On November 14, 2018, the Bureau of Labor Statistics announced that the CPI–U increased 2.5% over the last 12 months.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[EPA–HQ–OAR–2017–0175; FRL–9987–02–OAR]

RIN 2060–AT52

Air Quality: Revision to the Regulatory Definition of Volatile Organic Compounds—Exclusion of cis-1,1,1,4,4,4-hexafluorobut-2-ene (HFO–1336mzz–Z)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On May 1, 2018, the U.S. Environmental Protection Agency (EPA) published a proposed rule seeking comments in response to a petition requesting the revision of the EPA's regulatory definition of volatile organic compounds (VOC) to exempt *cis*-1,1,1,4,4,4-hexafluorobut-2-ene (also known as HFO–1336mzz–Z; CAS number 692–49–9). The EPA is now taking final action to revise the regulatory definition of VOC under the Clean Air Act (CAA). This final action adds HFO–1336mzz–Z to the list of compounds excluded from the regulatory definition of VOC on the basis that this compound makes a negligible contribution to tropospheric ozone (O_3) formation.

DATES: This final rule is effective on January 28, 2019.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2017–0175. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.,* Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted materials, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Dr. Souad Benromdhane, Office of Air Quality Planning and Standards, Health and Environmental Impacts Division, Mail Code C539–07, Environmental Protection Agency, Research Triangle Park, NC 27711; telephone: (919) 541–4359; fax number: (919) 541–5315; email address: *benromdhane.souad@epa.gov*.

SUPPLEMENTARY INFORMATION:

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I. Does this action apply to me?

Entities potentially affected by this final rule include, but are not necessarily limited to, the following: State and local air pollution control agencies that adopt and implement regulations to control air emissions of VOC; and industries manufacturing and/or using HFO–1336mzz–Z for use in polyurethane rigid insulating foams, refrigeration, and air conditioning. Potential entities that may be affected by this action include:

TABLE 1—POTENTIALLY AFFECTED ENTITIES BY NORTH AMERICAN INDUSTRIAL CLASSIFICATION SYSTEM (NAICS) CODE

Category	NAICS code	Description of regulated entities
Industry	326140	Polystyrene Foam Product Manufacturing.
Industry	326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing.
Industry	333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.
Industry	3363	Motor Vehicle Parts Manufacturing.
Industry	336611	Ship Building and Repairing.
Industry	336612	Boat Building.
Industry	339999	All other Miscellaneous Manufacturing.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that might be affected by this deregulatory action. This table lists the types of entities that the EPA is now aware of that could potentially be affected to some extent by this action. Other types of entities not listed in the table could also be affected to some extent. To determine whether your entity is directly or indirectly affected by this action, you should consult your state or local air pollution control and/or air quality management agencies.

II. Background

A. The EPA's VOC Exemption Policy

Tropospheric O_3, commonly known as smog, is formed when VOC and nitrogen oxides (NO_X) react in the atmosphere in the presence of sunlight. Because of the harmful health effects of O_3, the EPA and state governments limit the amount of VOC that can be released into the atmosphere. VOC form O_3 through atmospheric photochemical reactions, and different VOC have different levels of reactivity. That is, different VOC do not react to form O_3 at the same speed or do not form O_3 to the same extent. Some VOC react slowly or form less O_3; therefore, changes in their emissions have limited effects on local or regional O_3 pollution episodes. It has been the EPA's policy since 1971, that certain organic compounds with a negligible level of reactivity should be excluded from the regulatory definition of VOC in order to focus VOC control efforts on compounds that significantly affect O_3 concentrations. The EPA also believes that exempting such compounds creates an incentive for industry to use negligibly reactive compounds in place of more highly reactive compounds that are regulated as VOC. The EPA lists compounds that it has determined to be negligibly reactive in its regulations as being excluded from the regulatory definition of VOC (40 CFR 51.100(s)).

The CAA requires the regulation of VOC for various purposes. Section 302(s) of the CAA specifies that the EPA has the authority to define the meaning of ''VOC'' and, hence, what compounds shall be treated as VOC for regulatory purposes. The policy of excluding negligibly reactive compounds from the regulatory definition of VOC was first laid out in the ''Recommended Policy on Control of Volatile Organic Compounds'' (42 FR 35314, July 8, 1977) (from here forward referred to as the 1977 Recommended Policy) and was supplemented subsequently with the ''Interim Guidance on Control of Volatile Organic Compounds in Ozone State Implementation Plans'' (70 FR 54046, September 13, 2005) (from here forward referred to as the 2005 Interim Guidance). The EPA uses the reactivity of ethane as the threshold for determining whether a compound has negligible reactivity. Compounds that are less reactive than, or equally reactive to, ethane under certain assumed conditions may be deemed negligibly reactive and, therefore, suitable for exemption from the regulatory definition of VOC. Compounds that are more reactive than ethane continue to be considered VOC for regulatory purposes and, therefore, are subject to control requirements. The selection of ethane as the threshold compound was based on a series of smog chamber experiments that underlay the 1977 Recommended Policy.

The EPA has used three different metrics to compare the reactivity of a specific compound to that of ethane: (i) The rate constant for reaction with the hydroxyl radical (OH) (known as k_{OH}); (ii) the maximum incremental reactivity (MIR) on a reactivity per unit mass basis; and (iii) the MIR expressed on a reactivity per mole basis. Differences between these three metrics are discussed below.

The k_{OH} is the rate constant of the reaction of the compound with the OH radical in the air. This reaction is often, but not always, the first and rate-limiting step in a series of chemical reactions by which a compound breaks down in the air and contributes to O_3 formation. If this step is slow, the compound will likely not form O_3 at a very fast rate. The k_{OH} values have long been used by the EPA as metrics of photochemical reactivity and O_3-forming activity, and they were the basis for most of the EPA's early exemptions of negligibly reactive compounds from the regulatory definition of VOC. The k_{OH} metric is inherently a molar-based comparison, *i.e.,* it measures the rate at which molecules react.

The MIR, both by mole and by mass, is a more updated metric of photochemical reactivity derived from a computer-based photochemical model, and it has been used as a metric of reactivity since 1995. This metric considers the complete O_3-forming activity of a compound over multiple hours and through multiple reaction pathways, not merely the first reaction step with OH. Further explanation of the MIR metric can be found in Carter (1994).

The EPA has considered the choice between MIRs with a molar or mass basis for the comparison to ethane in past rulemakings and guidance. In the 2005 Interim Guidance, the EPA stated:

> [A] comparison to ethane on a mass basis strikes the right balance between a threshold that is low enough to capture compounds that significantly affect ozone concentrations and a threshold that is high enough to exempt some compounds that may usefully substitute for more highly reactive compounds.
>
> When reviewing compounds that have been suggested for VOC-exempt status, EPA will continue to compare them to ethane using k_{OH} expressed on a molar basis and MIR values expressed on a mass basis.

The 2005 Interim Guidance notes that the EPA will consider a compound to be negligibly reactive if it is equally as or less reactive than ethane based on either k_{OH} expressed on a molar basis *or* MIR values expressed on a mass basis.

The molar comparison of MIR is more consistent with the original smog chamber experiments, which compared equal molar concentrations of individual VOCs, supporting the selection of ethane as the threshold, while the mass-based comparison of MIR is consistent with how MIR values and other reactivity metrics are applied

in reactivity-based emission limits. It is, however, important to note that the mass-based comparison is slightly less restrictive than the molar-based comparison in that a few more compounds would qualify as negligibly reactive.

Given the two goals of the exemption policy articulated in the 2005 Interim Guidance, the EPA believes that ethane continues to be an appropriate threshold for defining negligible reactivity. And, to encourage the use of environmentally beneficial substitutions, the EPA believes that a comparison to ethane on a mass basis strikes the right balance between a threshold that is low enough to capture compounds that significantly affect O_3 concentrations and a threshold that is high enough to exempt some compounds that may usefully substitute for more highly reactive compounds.

The 2005 Interim Guidance also noted that concerns have sometimes been raised about the potential impact of a VOC exemption on environmental endpoints other than O_3 concentrations, including fine particle formation, air toxics exposures, stratospheric O_3 depletion, and climate change. The EPA has recognized, however, that there are existing regulatory or non-regulatory programs that are specifically designed to address these issues, and the EPA continues to believe in general that the impacts of VOC exemptions on environmental endpoints other than O_3 formation can be adequately addressed by these programs. The VOC exemption policy is intended to facilitate attainment of the O_3 National Ambient Air Quality Standards (NAAQS) and VOC exemption decisions will continue to be based primarily on consideration of a compound's contribution to O_3 formation. However, if the EPA determines that a particular VOC exemption is likely to result in a significant increase in the use of a compound and that the increased use would pose a significant risk to human health or the environment that would not be addressed adequately by existing programs or policies, then the EPA may exercise its judgment accordingly in deciding whether to grant an exemption.

B. Petition To List HFO–1336mzz–Z as an Exempt Compound

DuPont Chemicals & Fluoroproducts (DuPont) submitted a petition to the EPA on February 14, 2014, requesting that *cis*-1,1,1,4,4,4-hexafluorobut-2-ene (HFO–1336mzz–Z; CAS number 692–49–9) be exempted from the regulatory definition of VOC. The petition was based on the argument that HFO–1336mzz–Z has low reactivity relative to ethane. The petitioner indicated that HFO–1336mzz–Z may be used in a variety of applications as a replacement for foam expansion or blowing agents with higher global warming potential (GWP) (≤700 GWP) for use in polyurethane rigid insulating foams, among others. It is also a new developmental refrigerant as a potential working fluid for Organic Rankine Cycles (ORC).[1]

To support its petition, DuPont referenced several documents, including one peer-reviewed journal article on HFO–1336mzz–Z reaction rates (Baasandorj, M. *et al.,* 2011). DuPont also provided a supplemental technical report on the MIR of HFO–1336mzz–Z (Carter, 2011a). Per this report, the MIR of HFO–1336mzz–Z is 0.04 gram (g) O_3/g HFO–1336mzz–Z on the mass-based MIR scale. This reactivity rate is 86 percent lower than that of ethane (0.28 g O_3/g ethane). The reactivity rate k_{OH} for the gas-phase reaction of OH radicals with HFO–1336mzz–Z (k_{OH}) has been measured to be $4.91 \times 10_{-13}$ centimeter (cm)^3/molecule-seconds at ~296 degrees Kelvin (K) (Pitts *et al.,* 1983, Baasandorj *et al.,* 2011). This k_{OH} rate is twice as high as that of ethane (k_{OH} of ethane = $2.4 \times 10_{-13}$ cm^3/molecule-sec at ~298 K) and, therefore, suggests that HFO–1336mzz–Z is twice as reactive as ethane. In most cases, chemicals with high k_{OH} values also have high MIR values, but for HFO–1336mzz–Z, the products that are formed in subsequent reactions are expected to be poly fluorinated compounds, which do not contribute to O_3 formation (Baasandorj *et al.,* 2011). Based on the current scientific understanding of tetrafluoroalkene reactions in the atmosphere, it is unlikely that the actual O_3 impact on a mass basis would equal or exceed that of ethane in the scenarios used to calculate VOC reactivity (Baasandorj *et al.,* 2011; Carter, 2011a).

To address the potential for stratospheric O_3 impacts, the petitioner contended that, because the atmospheric lifetime of HFO–1336mzz–Z due to loss by OH reaction was estimated to be ~20 days and it does not contain chlorine or bromine, it is not expected to contribute to the depletion of the stratospheric O_3 layer.

III. The EPA's Assessment of the Petition

On May 1, 2018, the EPA published a proposed rulemaking (83 FR 19026) seeking comments in response to the petition to revise the EPA's regulatory definition of VOC for exemption of HFO–1336mzz–Z. The EPA is taking final action to respond to the petition by exempting HFO–1336mzz–Z from the regulatory definition of VOC. This action is based on consideration of the compound's low contribution to tropospheric O_3 and the low likelihood of risk to human health or the environment, including stratospheric O_3 depletion, toxicity, and climate change. Additional information on these topics is provided in the following sections.

A. Contribution to Tropospheric Ozone Formation

As noted in studies cited by the petitioner, HFO–1336mzz–Z has a MIR value of 0.04 g O_3/g VOC for ''averaged conditions,'' versus 0.28 g O_3/g VOC for ethane (Carter, 2011). Therefore, the EPA considers HFO–1336mzz–Z to be negligibly reactive and eligible for VOC-exempt status in accordance with the Agency's long-standing policy that compounds should so qualify where either reactivity metric (k_{OH} expressed on a molar basis or MIR expressed on a mass basis) indicates that the compound is less reactive than ethane. While the overall atmospheric reactivity of HFO–1336mzz–Z was not studied in an experimental smog chamber, the chemical mechanism derived from other chamber studies (Carter, 2011) was used to model the complete formation of O_3 for an entire single day under realistic atmospheric conditions (Carter, 2011a). Therefore, the EPA believes that the MIR value calculated in the Carter study submitted by the petitioner is reliable.

Table 2 presents three reactivity metrics for HFO–1336mzz–Z as they compare to ethane.

[1] Konstantinos Kontomaris, 2014, HFO–1336mzz–Z High Temperature Chemical Stability and Use as a Working Fluid in Organic Rankine Cycles. International Refrigeration and Air Conditioning Conference. Purdue University: *https://www.chemours.com/Refrigerants/en_US/products/Opteon/Stationary_Refrigeration/assets/downloads/2014_Purdue-Paper-Opteon-MZ.pdf.*

TABLE 2—REACTIVITIES OF ETHANE AND HFO–1336MZZ–Z

Compound	k_{OH} (cm^3/molecule-sec)	Maximum incremental reactivity (MIR) (g O_3/mole VOC)	Maximum incremental reactivity (MIR) (g O_3/g VOC)
Ethane	2.4×10^{-13}	8.4	0.28
HFO–1336mzz–Z	4.91×10^{-13}	6.6	0.04

Notes:
[1.] k_{OH} value at 298 K for ethane is from Atkinson *et al.,* 2006 (page 3626).
[2.] k_{OH} value at 296 K for HFO–1336mzz–Z is from Baasandorj, 2011.
[3.] Mass-based MIR value (g O_3/g VOC) of ethane is from Carter, 2011.
[4.] Mass-based MIR value (g O_3/g VOC) of HFO–1336mzz–Z is from a supplemental report by Carter, 2011a.
[5.] Molar-based MIR (g O_3/mole VOC) values were calculated from the mass-based MIR (g O_3/g VOC) values using the number of moles per gram of the relevant organic compound.

The reaction rate of HFO–1336mzz–Z with the OH radical (k_{OH}) has been measured to be 4.91×10^{-13} cm^3/molecule-sec (Baasandorj *et al.,* 2011); other reactions with O_3 and the nitrate radical were negligibly small. The corresponding reaction rate of ethane with OH is $2.4 \times 10^{-13}cm^3$/molecule-sec (Atkinson *et al.,* 2006). The data in Table 2 show that HFO–1336mzz–Z has a higher k_{OH} value than ethane, meaning that it initially reacts twice as fast in the atmosphere as ethane. However, the resulting unsaturated fluorinated compounds in the atmosphere are short lived and react more slowly to form O_3 (Baasandorj *et al.,* 2011). The mass based MIR is 0.04 g O_3/g VOC and much lower than that of ethane.

A molecule of HFO–1336mzz–Z is less reactive than a molecule of ethane in terms of complete O_3-forming activity as shown by the molar-based MIR (g O_3/mole VOC) values. One gram of HFO–1336mzz–Z has a lower capacity than one gram of ethane to form O_3 in terms of a mass-based MIR. Thus, following the 2005 Interim Guidance in striking a balance between reactivity on a molar basis as well as a gram basis, the EPA finds HFO–1336mzz–Z to be eligible for exemption from the regulatory definition of VOC based on both the molar- and mass-based MIR.

B. Potential Impacts on Other Environmental Endpoints

The EPA's decision to exempt HFO–1336mzz–Z from the regulatory definition of VOC is based on our findings above. However, as noted in the 2005 Interim Guidance, the EPA reserves the right to exercise its judgment in certain cases where an exemption is likely to result in a significant increase in the use of a compound and a subsequent significantly increased risk to human health or the environment. In this case, the EPA does not find that exemption of HFO–1336mzz–Z would result in an increase of risk to human health or the environment, with regard to stratospheric O_3 depletion, toxicity and climate change. Additional information on these topics is provided in the following sections.

1. Contribution to Stratospheric Ozone Depletion

HFO–1336mzz–Z is unlikely to contribute to the depletion of the stratospheric O_3 layer. The O_3 depletion potential (ODP) of HFO–1336mzz–Z is expected to be negligible based on several lines of evidence: The absence of chlorine or bromine in the compound and the atmospheric reactions described in Carter (2008). Because HFO–1336mzz–Z has a k_{OH} value that is twice as high as that of ethane (see section III.A ''Contribution to Tropospheric Ozone Formation''), it will decay before it has a chance to reach the stratosphere and, thus, will not participate in O_3 destruction.

2. The Significant New Alternatives Policy (SNAP) Program Acceptability Findings

The SNAP program is the EPA's program to evaluate and regulate substitutes for end-uses historically using O_3-depleting chemicals. Under section 612(c) of the CAA, the EPA is required to identify and publish lists of acceptable and unacceptable substitutes for class I or class II O_3-depleting substances. Per the SNAP program findings, the ODP of HFO–1336mzz–Z is zero. The SNAP program has listed HFO–1336mzz–Z as an acceptable substitute for a number of foam blowing end-uses provided in 79 FR 62863, October 21, 2014 (USEPA, 2014), and as an acceptable substitute in the refrigeration and air conditioning sector in heat transfer, as well as in chillers and industrial process air conditioning provided in 81 FR 32241, May 23, 2016 (USEPA, 2016).

3. Toxicity

Based on screening assessments of the health and environmental risks of HFO–1336mzz–Z, the SNAP program anticipated that users will be able to use the compound without significantly greater health risks than presented by use of other available substitutes for the same uses (USEPA, 2014, 2016).

The EPA anticipates that HFO–1336mzz–Z will be used consistent with the recommendations specified in the material safety data sheet (SDS) (DuPont, 2011). According to the SDS, potential health effects from inhalation of HFO–1336mzz–Z include skin or eye irritation or frostbite. Exposure to high concentrations of HFO–1336mzz–Z from misuse or intentional inhalation abuse may cause irregular heartbeat. In addition, HFO–1336mzz–Z could cause asphyxiation if air is displaced by vapors in a confined space. The Workplace Environmental Exposure Limit (WEEL) committee of the Occupational Alliance for Risk Science (OARS) reviewed available animal toxicity data and recommends a WEEL for the workplace of 500 parts per million (ppm) (3350 mg/m^3) time-weighted average (TWA) for an 8-hour workday as provided in the OARS (OARS, 2014).[2] This WEEL was derived based on reduced male body weight in the 13-week rat inhalation toxicity study (Dupont, 2011). The WEEL is also protective against skeletal fluorosis, which may occur at higher exposures because of metabolism. The EPA anticipates that users will be able to meet the WEEL and address potential health risks by following requirements and recommendations in the SDS and other safety precautions common to the refrigeration and air conditioning industry.

[2] Occupational Alliance for Risk Science (OARS–WEELs)—HFO–1336mzz–Z, 2014: *https://www.tera.org/OARS/HFO-1336mzz-Z%20WEEL%20FINAL.pdf.*

HFO–1336mzz–Z is not regulated as a hazardous air pollutant (HAP) under title I of the CAA. Also, it is not listed as a toxic chemical under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA).

The Toxic Substances Control Act (TSCA) gives the EPA authority to assess and prevent potential unreasonable risks to human health and the environment before a new chemical substance is introduced into commerce. Section 5 of TSCA requires manufacturers and importers to notify the EPA before manufacturing or importing a new chemical substance by submitting a Premanufacture Notice (PMN) prior to the manufacture (including import) of the chemical. Under the TSCA New Chemicals Program, the EPA then assesses whether an unreasonable risk may, or will, be presented by the expected manufacturing, processing, distribution in commerce, use, and disposal of the new substance. The EPA has determined, however, that domestic manufacturing, use in non-industrial products, or use other than as described in the PMN may cause serious chronic health effects. To mitigate risks identified during the PMN review of HFO–1336mzz–Z, the EPA issued a Significant New Use Rule (SNUR) under TSCA on June 5, 2015, to require persons to submit a Significant New Use Notice (SNUN) to the EPA at least 90 days before they manufacture or process HFO–1336mzz–Z for uses other than those described in the PMN (80 FR 32003, 32005, June 5, 2015). The required notification will provide the EPA with the opportunity to evaluate the intended use and, if necessary, to prohibit or limit that activity before it occurs. The EPA, therefore, believes that existing programs address the risk of toxicity associated with the use of HFO–1336mzz–Z.

4. Contribution to Climate Change

The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (IPCC AR5) estimated the lifetime of HFO–1336mzz–Z to be approximately 22 days (Baasandorj *et al.,* 2011), and the gas-phase degradation of HFO–1336–mzz–Z is not expected to lead to a significant formation of atmospherically long-lived species. The radiative efficiency of HFO–1336–mzz–Z was calculated to be 0.38 watts per square meter at the earth's surface per part per billion concentration of the material (W m^{-2} ppb^{-1}) based on Baasandorj *et al.,* 2011. The report estimated the resulting 100-year GWP to be 9, meaning that, over a 100-year period, one ton of HFO–1336mzz–Z traps 9 times as much warming energy as one ton of carbon dioxide (CO_2) (IPCC, 2013). HFO–1336mzz–Z's GWP of 9 is lower than those of some of the substitutes in a variety of foam blowing end-uses and in centrifugal and positive displacement chillers, heat transfer, and industrial process air conditioning. HFO–1336mzz–Z was developed to replace other chemicals used for similar end-uses with GWP ranging from 725 to 5,750 such as CFC–11, CFC–113, HCFC–141b and HCFC–22. The petitioner claims that HFO–1336mzz–Z is a better alternative to other substitutes in foam expansion or blowing agents for use in polyurethane rigid insulating foams. Thermal test data and energy efficiency trials indicate that HFO–1336mzz–Z will provide superior insulating value and, thus, reduces climate change impacts both directly by its relatively low GWP and indirectly by decreasing energy consumption throughout the lifecycle of insulated foams in appliances, buildings, refrigerated storage and transportation.

C. Response to Comments and Conclusion

The EPA received five comments on the May 1, 2018, notice of proposed rulemaking. One commenter supported the proposed action to exempt HFO–1336mzz–Z from the EPA's definition of VOC in 40 CFR 51.100(s), one opposed the proposed action, and three raised issues that were outside the scope of this rulemaking including a discussion about air and water quality in Asia and Mexico, and climate change. These three anonymous comments failed to identify any specific issue that is germane to our proposal to exempt HFO–1336mzz–Z. Substantial comments and the EPA's responses are provided below.

Comment: One commenter (ID: EPA–HQ–OAR–2017–0175–0010) expressed concern that ''the EPA should not exempt HFO–1336mzz–Z . . . [and that] . . . surely there is a reason it was . . . [regulated as a VOC] in the first place.'' The commenter expressed skepticism that ''other regulatory groups outside of the EPA'' would prevent the compound from being used, if there were other environmental impacts than O_3, once the EPA exempted this compound. This commenter also expressed concern that the petitioner's data ''could potentially be biased'' and they ''. . . would like to read a proposal that gets its information from a more unbiased source and considers how it will deal with possible drawbacks of deregulating HFO–1336mzz–Z.''

Response: The commenter appears to state that HFO–1336mzz–Z should not be exempted from the definition of VOC simply because it is currently included in the definition of VOC. This is a circular argument, and, if followed, the EPA would never be able to exempt any substances from the definition of VOC, even where, as here, scientific data supported such an exemption. The commenter does not provide any scientific evidence that rebuts the petitioner's data supporting the demonstration that HFO–1336mzz–Z is eligible for this exemption.

The reason HFO–1336mzz–Z is currently regulated as a VOC is because it meets the EPA's definition of VOC in 40 CFR 51.100(s) as ''any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid . . . *which participates in atmospheric photochemical reactions.*'' [emphasis added] The petitioner submitted data to the EPA that show HFO–1336mzz–Z negligibly participates in atmospheric photochemical reactions, presenting a better environmental alternative for similar industrial applications, and therefore should be excluded from the definition of VOC. As explained above, our approval would allow states to encourage VOC substitutions with negligibly reactive compounds that would reduce O_3 formation.

The EPA would like to clarify the statement in the proposal which referred to ''existing regulatory or non-regulatory programs that are specifically designed to address'' other environmental issues besides tropospheric O_3 formation, such as fine particle formation, air toxics exposures, stratospheric O_3 depletion, and climate change. When referring to existing regulatory or non-regulatory programs, the EPA was not referring to ''other regulatory groups outside of the EPA,'' as the commenter suggested. Rather, Congress has granted the EPA with other authorities under the CAA that allow the Agency to address these issues specifically (*e.g.,* NAAQS program for fine particle pollution; section 112 for air toxics). As stated in the 2005 Interim Guidance, where an exemption is likely to result in a significant increase in the use of a compound and a subsequent significantly increased risk to human health or the environment, the EPA reserves the right to exercise its judgment and choose not to grant a petition for an exemption from the definition of VOC, even where the substance meets the reactivity metrics. However, as explained in section III.B. of this final rule, the EPA does not believe an exemption of HFO–1336mzz–

Z will lead to significant environmental impacts.

To the extent the commenter is raising concerns that the EPA's action will result in non-EPA organizations treating HFO–1336mzz–Z differently, we note that this action does not prohibit state and local air pollution regulatory agencies from regulating HFO–1336mzz–Z. Some local agencies continue restrictions on the use of certain compounds that have been excluded from the definition of VOC by the EPA.

With respect to the comment that the petitioner's data could potentially be biased, the EPA uses credible, peer-reviewed information in its review of VOC exemption petitions. In this regard, and as discussed in our proposed rule and in this action, we note that the journal article submitted by DuPont on HFO–1336mzz–Z reaction rates was performed by the National Oceanic and Atmospheric Administration and published in *The Journal of Physical Chemistry,* a peer-reviewed journal. The other primary document relied on to support the exemption petition was authored by the researcher who developed the MIR scale (Carter, 2011a). Staff in the EPA's Office of Research and Development reviewed these documents as part of the petition assessment process and find that they are consistent with current understanding of atmospheric chemistry. We are not aware of information that would indicate they are biased.

Therefore, for reasons discussed above, the EPA is finalizing this rule with no changes. The EPA finds that HFO–1336mzz–Z is negligibly reactive with respect to its contribution to tropospheric O_3 formation and, thus, may be exempted from the EPA's definition of VOC in 40 CFR 51.100(s). HFO–1336mzz–Z has been listed as acceptable for use in several industrial and commercial refrigeration and air conditioning end-uses, as well as for use as a blowing agent under the SNAP program (USEPA, 2014, 2016). The EPA has also determined that exemption of HFO–1336mzz–Z from the regulatory definition of VOC will not result in an increase of risk to human health and the environment, and, to the extent that use of this compound does have impacts on other environmental endpoints, those impacts are adequately managed by existing programs. For example, HFO–1336mzz–Z has a similar or lower stratospheric O_3 depletion potential than available substitutes in those end-uses, and the toxicity risk from using HFO–1336mzz–Z is not significantly greater than the risk from using other available alternatives for the same uses. The EPA has concluded that non-tropospheric O_3-related risks associated with potential increased use of HFO–1336mzz–Z are adequately managed by SNAP. The EPA does not expect significant use of HFO–1336mzz–Z in applications not covered by the SNAP program. To the extent that the compound is used in other applications not already reviewed under SNAP or under the New Chemicals Program under TSCA, the SNUR in place under TSCA requires that any significant new use of a chemical be reported to the EPA using a SNUN. Any significant new use of HFO–1336mzz–Z would, thus, need to be evaluated by the EPA, and the EPA will continually review the availability of acceptable substitute chemicals under the SNAP program.

IV. Final Action

The EPA is responding to the petition by revising its regulatory definition of VOC at 40 CFR 51.100(s) to add HFO–1336mzz–Z to the list of compounds that are exempt from the regulatory definition of VOC because it is less reactive than ethane based on a comparison of mass-based MIR and molar-based MIR metrics and is, therefore, considered negligibly reactive. As a result of this action, if an entity which uses or produces this compound and is subject to the EPA regulations limiting the use of VOC in a product, limiting the VOC emissions from a facility, or otherwise controlling the use of VOC for purposes related to attaining the O_3 NAAQS, this compound will not be counted as a VOC in determining whether these regulatory obligations have been met. This action would affect whether this compound is considered a VOC for state regulatory purposes to reduce O_3 formation, if a state relies on the EPA's regulatory definition of VOC. States are not obligated to exclude from control as a VOC those compounds that the EPA has found to be negligibly reactive. However, no state may take credit for controlling this compound in its O_3 control strategy. Consequently, reductions in emissions for this compound will not be considered or counted in determining whether states have met the rate of progress requirements for VOC in State Implementation Plans or in demonstrating attainment of the O_3 NAAQS.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. This final rule provides meaningful burden reduction by exempting HFO–1336mzz–Z from the VOC regulatory definition and relieving manufacturers, distributers, and users from recordkeeping or reporting requirements. This action is voluntary in nature and has non-quantifiable cost savings given the unpredictability in who or how much of it will be used.

C. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA. It does not contain any recordkeeping or reporting requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action removes HFO–1336mzz–Z from the regulatory definition of VOC and, thereby, relieves manufacturers, distributers, and users of the compound from tropospheric O_3 requirements to control emissions of the compound.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments, or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. This final rule removes HFO–1336mzz–Z from the regulatory definition of VOC and, thereby, relieves manufacturers, distributers and users from tropospheric O_3 requirements to control emissions of the compound. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

This action is not subject to Executive Order 13045, because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. Since HFO–1336mzz–Z is utilized in specific industrial applications where children are not present and dissipates quickly (*e.g.,* lifetime of 22 days) with short-lived end products, there is no exposure or disproportionate risk to children. This action removes HFO–1336mzz–Z from the regulatory definition of VOC and, thereby, relieves manufacturers, distributers and users from tropospheric O_3 requirements to control emissions of the compound.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629 February 16, 1994). This action removes HFO–1336mzz–Z from the regulatory definition of VOC and, thereby, relieves manufacturers, distributers, and users of the compound from tropospheric O_3 requirements to control emissions of the compound.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

M. Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the District of Columbia Circuit Court within 60 days from the date the final action is published in the **Federal Register**. Filing a petition for review by the Administrator of this final action does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review must be filed, and shall not postpone the effectiveness of such action. Thus, any petitions for review of this action related to the exemption of HFO–1336mzz–Z from the regulatory definition of VOC must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date the final action is published in the **Federal Register**.

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List of Subjects in 40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: November 16, 2018.

Andrew R. Wheeler,

Acting Administrator.

For reasons stated in the preamble, part 51 of chapter I of title 40 of the Code of Federal Regulations is amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

Subpart F—Procedural Requirements

■ 2. Section 51.100 is amended by revising paragraph (s)(1) introductory text to read as follows:

§ 51.100 Definitions.

* * * * *

(s) * * *

(1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: Methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC–113); trichlorofluoromethane (CFC–11); dichlorodifluoromethane (CFC–12); chlorodifluoromethane (HCFC–22); trifluoromethane (HFC–23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC–114); chloropentafluoroethane (CFC–115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC–123); 1,1,1,2-tetrafluoroethane (HFC–134a); 1,1-dichloro 1-fluoroethane (HCFC–141b); 1-chloro 1,1-difluoroethane (HCFC–142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC–124); pentafluoroethane (HFC–125); 1,1,2,2-tetrafluoroethane (HFC–134); 1,1,1-trifluoroethane (HFC–143a); 1,1-difluoroethane (HFC–152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC–225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC–225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43–10mee); difluoromethane (HFC–32); ethylfluoride (HFC–161); 1,1,1,3,3,3-hexafluoropropane (HFC–236fa); 1,1,2,2,3-pentafluoropropane (HFC–245ca); 1,1,2,3,3-pentafluoropropane (HFC–245ea); 1,1,1,2,3-pentafluoropropane (HFC–245eb); 1,1,1,3,3-pentafluoropropane (HFC–245fa); 1,1,1,2,3,3-hexafluoropropane (HFC–236ea); 1,1,1,3,3-pentafluorobutane (HFC–365mfc); chlorofluoromethane (HCFC–31); 1 chloro-1-fluoroethane (HCFC–151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC–123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$ or HFE–7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE–7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C3F7OCH3, HFE–7000); 3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE–7500); 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea); methyl formate (HCOOCH3); 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE–7300); propylene carbonate; dimethyl carbonate; *trans*-1,3,3,3-tetrafluoropropene; HCF_2OCF_2H (HFE–134); $HCF_2OCF_2OCF_2H$ (HFE–236cal2); $HCF_2OCF_2CF_2OCF_2H$ (HFE–338pcc13); $HCF_2OCF_2OCF_2CF_2OCF_2H$ (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180)); *trans* 1-chloro-3,3,3-trifluoroprop-1-ene; 2,3,3,3-tetrafluoropropene; 2-amino-2-methyl-1-propanol; t-butyl acetate; 1,1,2,2- Tetrafluoro -1-(2,2,2-trifluoroethoxy) ethane; *cis*-1,1,1,4,4,4-hexafluorobut-2-ene (HFO–1336mzz-Z); and perfluorocarbon compounds which fall into these classes:

* * * * *

[FR Doc. 2018–25891 Filed 11–27–18; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 76

[MB Docket No. 17–105; FCC 18–150]

Procedural Revisions to the Filing of Open Video System Certification Applications

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (FCC or Commission) modernizes the Open Video System (OVS) filing procedures by specifying that OVS applications be required to send certification applications, including FCC Form 1275 and all attachments, as well as notices of intent, via electronic email (email) delivery to a designated Commission email address. The FCC also eliminates certain existing requirements associated with the rule. Parties wishing to respond to a FCC Form 1275 filing must submit comments or oppositions via electronic mail (email).

DATES: *Effective date:* November 28, 2018.

FOR FURTHER INFORMATION CONTACT: For additional information on this proceeding, contact Sonia Greenaway Mickle, *Sonia.Greenaway@fcc.gov,* of the Policy Division, Media Bureau, (202) 418–1419.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Order, FCC 18–150, adopted and released on October 25, 2018. The full text of this document is available for public inspection and copying during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street SW, Room CY–A257, Washington, DC 20554. This document will also be available via ECFS at *http://fjallfoss.fcc.gov/ecfs/*. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat. Copies of the materials can be obtained from the FCC's Reference Information Center at (202) 418–0270. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an email to *fcc504@fcc.gov* or calling the Commission's Consumer and Governmental Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (TTY).

Synopsis

1. The Commission in this Order establishes electronic filing procedures for parties seeking to operate an Open Video System (OVS) to submit a certification application and notice of intent. By replacing our current paper filing requirements for OVS applications and notices with an electronic filing system, this Order modernizes our regulations, reduces burdens for OVS applicants, and increases the efficiency of the Commission's processing of applications.

2. The Telecommunications Act of 1996 added section 653 to the Communications Act of 1934, as amended (the Act), establishing OVS as a new framework for entry into the multichannel video programming distribution marketplace.[1] Any party

[1] Telecommunications Act of 1996, Public Law 104–104, 110 Stat. 56, approved February 8, 1996. An open video system is similar to a cable system in that it is a facilities-based system for the delivery of video programming. Unlike cable systems, however, open video systems must set aside up to two thirds of their channel capacity for the delivery of independent programming of third parties. The OVS framework was established to provide competition and lower barriers to entry in the provision of video programming to consumers. *See Implementation of Section 302 of the Telecommunications Act of 1996, Open Video Systems,* 11 FCC Rcd 18223, 18227, para. 2–3 (1996) *(Second Report and Order).* The approach developed for the OVS model provides streamlined

(b) In the Register's discretion, four years after the close of any calendar year, the Register of Copyrights may close out the royalty payments account for that calendar year, including any sub-accounts, that are subject to a final distribution order under which royalty payments have been disbursed. Following closure of an account, the Register will treat any funds remaining in that account, or subsequent deposits that would otherwise be attributable to that calendar year, as attributable to the succeeding calendar year.

Dated: September 10, 2018.

Karyn Temple,

Acting Register of Copyrights and Director of the U.S. Copyright Office.

Approved by:

Carla D. Hayden,

Librarian of Congress.

[FR Doc. 2018–22372 Filed 10–12–18; 8:45 am]

BILLING CODE 1410–30–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2012–0133; FRL–9985–37–OAR]

RIN 2060–AS79

National Emission Standards for Hazardous Air Pollutants: Manufacture of Amino/Phenolic Resins Risk and Technology Review Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; notification of final action on reconsideration.

SUMMARY: This action finalizes amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Manufacture of Amino/Phenolic Resins (APR). These final amendments are in response to petitions for reconsideration regarding the APR NESHAP rule revisions that were promulgated on October 8, 2014. In this action, we are revising the maximum achievable control technology (MACT) standard for continuous process vents (CPVs) at existing affected sources. In addition, we are extending the compliance date for CPVs at existing sources. We also are revising the requirements for storage vessels at new and existing sources during periods when an emission control system used to control vents on fixed roof storage vessels is undergoing planned routine maintenance. To improve the clarity of the APR NESHAP, we are also finalizing five minor technical rule corrections. In this action, we have not reopened any other aspects of the October 2014 final amendments to the NESHAP for the Manufacture of APR, including other issues raised in petitions for reconsideration of the October 2014 rule.

DATES: This final rule is effective on October 15, 2018. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of October 15, 2018.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2012–0133. All documents in the docket are listed on the *https://www.regulations.gov* website. Although listed, some information is not publicly available, *e.g.,* confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *https://www.regulations.gov* or in hard copy at the EPA Docket Center (EPA/DC), EPA WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, please contact Mr. Art Diem, Sector Policies and Programs Division (Mail Code E143–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–1185; email address: *diem.art@epa.gov*. For information about the applicability of the NESHAP to a particular entity, contact Ms. Maria Malave, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, Mail Code 2227A, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (202) 564–7027; fax number: (202) 564–0050; and email address: *malave.maria@epa.gov*.

SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. A number of acronyms and abbreviations are used in this preamble. While this may not be an exhaustive list, to ease the reading of this preamble and for reference purposes, the following terms and acronyms are defined:

APR amino/phenolic resin
CAA Clean Air Act
CFR Code of Federal Regulations
CPV continuous process vent
CRA Congressional Review Act
EPA U.S. Environmental Protection Agency
FR Federal Register
HAP hazardous air pollutants
HON Hazardous Organic NESHAP
ICR information collection request
MACT maximum achievable control technology
MIR maximum individual risk
MON Miscellaneous Organic NESHAP
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NTTAA National Technology Transfer and Advancement Act
OMB Office of Management and Budget
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RTO regenerative thermal oxidizer
TRE total resource effectiveness
UMRA Unfunded Mandates Reform Act
UPL upper predictive limit
VCS voluntary consensus standards

Organization of this Document. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Categories and entities potentially affected by this final rule include, but are not limited to, facilities having a North American Industry Classification System (NAICS) code 325211. Facilities with this NAICS code are described as plastics material and resin manufacturing establishments, which includes facilities engaged in manufacturing amino resins and phenolic resins, as well as other plastic and resin types.

To determine whether your facility would be affected by this final action, you should examine the applicability criteria in 40 CFR 63.1400. If you have any questions regarding the applicability of any aspect of this final action, please contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. Where can I get a copy of this document and other related information?

The docket number for this final action regarding the APR NESHAP is Docket ID No. EPA–HQ–OAR–2012–0133.

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at *https://www.epa.gov/stationary-sourcesair-pollution/manufactureaminophenolic-resins-nationalemission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents on this same website.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit (the Court) by December 14, 2018. Under CAA section 307(d)(7)(B), only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Note, under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

This section also provides a mechanism for the EPA to reconsider the rule ''[i]f the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.'' Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background Information

On October 8, 2014, the EPA completed the residual risk and technology review of the January 20, 2000, APR MACT standards (65 FR 3276), and published its final rule amending the NESHAP for the APR Production source category at 40 CFR part 63, subpart OOO (79 FR 60898). Following promulgation of the October 2014 final rule, the EPA received three petitions for reconsideration from the Sierra Club, Tembec BTLSR (''Tembec'') (now Rayonier Advanced Materials Inc.), and Georgia-Pacific LLC (''Georgia-Pacific''), requesting administrative reconsideration of amended 40 CFR part 63, subpart OOO under CAA section 307(d)(7)(B).

In partial response to the petitions, the EPA reconsidered and requested comment on two distinct issues in the proposed rule amendments, published in the **Federal Register** on August 24, 2017 (82 FR 40103). These issues included: (1) The analysis, supporting data, and resulting emission standards for CPVs at existing sources; and (2) planned routine maintenance of emission control systems used to reduce hazardous air pollutants (HAP) emissions from storage vessels.

In addition, while the EPA granted reconsideration on the pressure relief device issues raised in one of the petitions for reconsideration, the EPA did not address this issue in the August 24, 2017, proposal and intends to address those issues separately in a future action.

We received public comments on the proposed rule amendments from five parties. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments are also available electronically through *https://www.regulations.gov* by searching Docket ID No. EPA–HQ–OAR–2012–0133.

In this document, the EPA is taking final action with respect to the issues on reconsideration addressed in the August 2017 proposal. Section III of this preamble summarizes the proposed rule amendments and the final rule amendments, presents public comments received on the proposed amendments and the EPA's responses to those comments, and explains our rationale for the rule revisions published here.

III. Summary of Final Action on Issues Reconsidered

The two reconsideration issues for which amendments are being finalized in this rulemaking are: (1) The analysis, supporting data, and resulting emission standards for CPVs at existing sources; and (2) planned routine maintenance of emission control systems used to reduce HAP emissions from storage vessels. In this rulemaking, we are also finalizing several minor technical corrections to the regulation text of 40 CFR part 63, subpart OOO.

A. Analysis, Supporting Data, and Resulting Emission Standards for CPVs at Existing Sources

1. What changes did we propose regarding CPV standards at existing sources?

In the August 2017 proposed amendments to 40 CFR part 63, subpart OOO, we proposed a revised emissions limit for CPVs at existing sources, addressing only back-end CPVs.

In addition, we requested comments on the following issues: (1) Whether the existing compliance date or another date for back-end CPVs is appropriate if the standard is revised; and (2) whether the EPA should promulgate a separate standard for front-end CPVs at existing sources and whether there are other front-end CPVs in the source category beyond those identified by the EPA.

For back-end CPVs at existing sources, we proposed a production-based HAP emission limit of 8.6 pounds of HAP per ton of resin produced. This emissions limit represents the MACT floor based on 2015 test data provided by Georgia-Pacific and Tembec, the only two companies in the source category with back-end CPVs. We also solicited comments on whether existing facilities would need additional time to comply with the proposed revised back-end CPV standards, noting that the compliance date in the October 2014 final rule is October 9, 2017, and that the APR NESHAP at 40 CFR 63.1401(d) provides the opportunity for existing facilities, on a case-by-case basis, to request a compliance extension from their permitting authorities of up to 1 year, if necessary, to install controls to meet a standard.

The EPA identified two front-end CPVs at APR production existing sources at proposal and requested information about any other front-end CPVs in the source category. Due to the characteristics of these two CPVs, we noted that these CPVs could be subcategorized into two types—reactor and non-reactor front-end CPVs, and separate standards for the two types of front-end CPVs would be consistent with how reactor and non-reactor vents have been regulated for batch processes for the APR Production source category. We also stated that if no other reactor or non-reactor front-end CPVs at existing affected sources were identified, or if no additional data were provided for any such CPVs, the EPA would consider adopting final revised standards for front-end CPVs at existing sources based on existing information. Based on our analysis of the data provided by Georgia-Pacific for its front-end reactor CPVs, we proposed that the MACT floor for front-end reactor CPVs at existing sources would be 0.61 pounds of HAP per hour. Based on our analysis of the data provided by INEOS Melamines for its front-end non-reactor CPV, we proposed that the MACT floor for front-end non-reactor CPVs at existing sources would be 0.022 pounds of HAP per hour. We received no information about any additional front-end CPVs during the comment period.

2. What comments did we receive regarding proposed amendments to CPV standards at existing sources?

The following is a summary of the significant comments received on the proposed amendments to CPV standards at existing sources and our responses to these comments.

Comment: One commenter stated that the EPA's updated risk analysis for INEOS Melamines and for the category are underestimated for reasons it has stated in comments on the October 2014 rule for this source category. The commenter also said the new analysis for INEOS Melamines only considers risks from formaldehyde and fails to consider the risks from other HAP emitted by the facility or the cumulative risks to the community from other pollution sources.

Response: We addressed the commenter's concerns regarding cumulative risks (and the various reasons the commenter claimed the risks were underestimated) in previous analyses in our October 2014 response to comments (Document EPA–HQ–OAR–2012–0133–0066). These same responses still apply and are not repeated here. Regarding the risk analysis for INEOS Melamines, the commenter is mistaken in asserting that the analysis only included formaldehyde. The risk analysis for the facility included all HAP emissions from equipment in the source category, and these HAP include both formaldehyde and methanol. As we noted in the August 2017 proposal, the 2014 risk modeling analysis indicated that the INEOS Melamines facility maximum individual risk (MIR) was estimated to be 0.4-in-1 million. As the risk driver was formaldehyde, we mentioned in the August 2017 proposal that the input files included 0.375 tons of formaldehyde emissions. We also discussed in the proposal that information received from INEOS Melamines indicated there were additional emissions of less than 0.03 tons per year from its non-reactor front-end CPV that were not accounted for in the 2014 modeling analysis. We explained in the proposal that when including these additional emissions in the risk estimate for the facility, the facility MIR would be about the same (less than 1-in-1 million), and we determined that additional quantitative risk analyses for this facility are not necessary. No updates to the risk analysis were made to other facilities, and the overall estimation of risks for the source category remain unchanged.

Comment: Several commenters were concerned about the proposed elimination of the use of the Total Resource Effectiveness (TRE) value as a compliance option for continuous process vents at an existing affected source. The commenters noted that the TRE provision is found in numerous other rules, such as the Hazardous Organic NESHAP (HON) and the Miscellaneous Organic NESHAP (MON). The commenters stated that the TRE provides facilities with the flexibility to reduce emissions in the most cost-effective manner. The commenters also stated that the EPA has not articulated a rational basis for eliminating the TRE and that the EPA should maintain the current TRE for this and all other rules affecting continuous process vents. The commenters further stated that by keeping the TRE for continuous process vents at a new affected source, but eliminating it for existing sources, the requirements for existing sources would become more restrictive and costly than those for new affected sources.

Response: In the development of the MACT requirements for this NESHAP and in other rules, such as the HON and the MON, a TRE was included in the rule to help define the regulated process vents. In those rules, data for only a portion of the process vents in the existing source category were available to base the MACT floor and beyond-the-floor analyses upon. To ensure the rule required control for all process vents in the source category that were similar to those for which the MACT floor and the level of the standard was set, the TRE was used. This value ensures that all the process vents in the source category with comparable characteristics, such as flow rate, emission rate, net heating value, etc., as the process vents used to establish the level of the standard are the ones required to meet the established level of control. In this case, the EPA now has information for every CPV at an existing source in this source category, and the characteristics of every CPV were considered in establishing the proposed revised MACT standards. Therefore, a TRE value is not necessary to define the regulated CPVs at existing sources.

For CPVs at new sources, the EPA did not propose to eliminate the TRE. Keeping the TRE for CPVs at these sources will continue to ensure the representativeness of the process vent on which the emission standards were based to the process vents regulated by that standard, as it is unknown what characteristics any future process vents will have. The commenters are not correct in their assertion that without the inclusion of the TRE, the proposed revised existing source requirements will become more restrictive and costly than the standards for new sources. The CPVs at new sources with characteristics similar to the vent on which the standard is based will be required to have greater emissions reductions than the reductions effectively required for existing sources (*i.e.,* 85-percent reduction for new sources compared to approximately 50-percent reduction in emissions for the

two existing CPVs that require control to meet the MACT standard).

Comment: One commenter expressed dissatisfaction with the EPA's beyond-the-floor analysis for the proposed existing source standards for back-end CPVs. The commenter stated that the EPA only examined new regenerative thermal oxidizers (RTOs) and did not consider less costly options, such as using existing controls or conducting process changes. The commenter also stated that the EPA did not address whether additional beyond-the-floor reductions would be achievable. The commenter further stated that cost effectiveness is a measure of whether the benefits of a particular action are worth the cost, and the EPA's practice of comparing marginal cost for beyond-the-floor options relative to the costs of the reductions achieved by the MACT floor does not answer the question of whether the beyond-the-floor option is cost effective.

Response: In evaluating the beyond-the-floor emissions control options, we considered control technologies and strategies that would be technologically feasible for the facilities in the source category that have these process vents. In this case, RTO is the only control technology known that could treat the low HAP concentration, high air flow exhaust from these vents. We explained in the memorandum, ''Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category,'' which is available in the docket for this action, that we also considered scrubbers and carbon adsorbers in this analysis, but found them to be technologically infeasible for this application. While it may be possible that a facility could make process changes to reduce emissions, this would be highly facility-specific, and the EPA does not have information to suggest any particular type of process change would reduce HAP from these vents. We did explain that RTOs are capable of achieving emission rates beyond the MACT floor. We used the EPA's control cost manual to evaluate costs of control. We did not have enough information to evaluate the cost effectiveness of process changes that could be used to meet the standard. Regarding the cost effectiveness of the technologically available option, *i.e.,* an RTO, we described the estimated cost of the beyond-the-floor option in the above-referenced memorandum. As shown in this memorandum, cost effectiveness was determined using capital and annual costs of an RTO, and the emissions reductions were determined using a baseline of no control compared to control using an RTO. The beyond-the-floor option was found to not be cost effective using these estimates.

Back-End CPVs

Comment: One commenter generally supported the levels of the back-end CPV standards for existing sources, but has some concerns regarding the associated compliance assurance measures and definitions. For the back-end CPVs, the commenter requested that an option to achieve an 85 percent reduction be included to ensure the standards for existing sources are not more stringent than those for new sources. The commenter also requested that the EPA keep the formerly included 12-month rolling average emission rate for back-end CPVs to account for emissions variability between resin types. Additionally, the commenter suggested that the EPA not change the definitions for reactor batch process vent and non-reactor batch process vent to ensure there is no confusion regarding applicability of the batch process vent provisions. Further, the commenter stated that the EPA should specify that initial compliance performance tests be conducted at ''maximum representative operating conditions.''

Response: We are not revising the format of the proposed standard for existing source back-end CPVs as the commenter requested. The 12-month rolling average emissions rate, formerly included in the October 2014 rule, was used to help account for variability in emission rates before the EPA had the information submitted by the facilities for each CPV, in which the highest HAP emitting resin was tested. The proposed standard accounted for variability in emissions while the highest HAP emitting resin was produced. Therefore, there is no need for compliance to be determined over a long period to account for variability in resins produced or the conditions present while producing high HAP emitting resins. The EPA is also not adding an 85-percent reduction compliance option for existing source back-end CPVs. In calculating the MACT floor, we determined the emissions limitation achieved by the best performing existing sources in the category based on the emissions per unit of resin produced. This production-based standard accounts for variability associated with the manufacturing process, including fluctuations in the amount of product produced and different types of product produced (*i.e.,* various resin types), as well as possible future process modifications to alter other production variables. An 85-percent emissions reduction compliance option does not reflect the MACT floor level of control for back-end CPVs at existing sources.

The proposed revised rule contains definitions for ''batch process vent,'' ''continuous process vent,'' ''non-reactor process vent,'' and ''reactor process vent.'' It is clear from these definitions that the rule provisions pertaining to ''reactor batch process vents'' and ''non-reactor batch process vents'' include only those vents that are ''batch process vents.'' It is also clear that the rule provisions pertaining to ''reactor continuous process vents'' and ''non-reactor continuous process vents'' include only those vents that are ''continuous process vents.'' Therefore, as the applicability of the rule provisions is sufficiently clear with these definitions, we have not added or changed the definitions related to these vents in the final rule beyond what was proposed.

We agree with the commenter that the initial compliance performance test should be conducted at ''maximum representative operating conditions.'' However, as this is already a specified condition for performance tests in 40 CFR 63.1413(a)(2)(ii)(A), we have not further revised the regulatory text.

Comment: One commenter stated that use of an upper predictive limit (UPL) in the standards for back-end CPVs at existing sources is not justified, since the EPA has extensive data for all the sources subject to the standard. The commenter stated that with such a comprehensive data set, it is likely that all variability is already accounted for, and there is no justification to assume there is additional variability that needs to be accounted for. The commenter also stated that the EPA did not disclose the actual emissions levels obtained by the sources in the category in the units of measurement used for the proposed standards and only presents the emission rates estimated by the UPL. The commenter stated that the standards are further weakened by not being required to determine compliance using the resin resulting in the highest HAP emissions, the way the MACT floor was calculated, but instead requiring compliance based on the resin with the highest HAP content. The commenter also stated that the alternative percent-reduction and concentration-based limits do not reflect emissions reductions achieved by best-performing sources.

Response: While we agree with the commenter that the EPA has a comprehensive data set for the back-end CPVs in the source category, the use of

the UPL is justified to account for variability that occurs due to process conditions when producing the highest HAP-emitting resins. We calculated the UPL values for each back-end CPV with that CPV's highest HAP-emitting resin to take this variability into consideration. As discussed in detail in the MACT floor memorandum, ''Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category,'' which is available in the docket for this action, we used the arithmetic average of the UPLs of the five best-performing back-end CPVs to calculate the MACT floor. To respond to the commenter's concerns about the calculation of the UPL, we have summarized the emissions information used to calculate the UPL values for each back-end CPV and included this information in a memorandum titled ''Addendum to Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category'' to the docket for this action. Regarding the compliance determination based on the resin with the highest HAP content, for these back-end CPVs, the liquid resin having the highest HAP content is the condition for which the highest HAP emissions result. This occurs because no significant quantities of HAP are created or destroyed in the drying process, and the drying process moves nearly all HAP in the liquid resin to the dryer vent (*i.e.,* back-end CPV). In addition, 40 CFR 63.1413(a)(2)(ii)(A) specifies that performance tests used to demonstrate compliance must be under ''maximum representative operating conditions,'' as defined at 40 CFR 63.1402. This term specifies conditions which reflect the highest organic HAP emissions reasonably expected to be vented to the control device or emitted to the atmosphere.

Regarding the alternative standards included in the rule for CPVs, the alternative standard is not a percent reduction based standard and is only a concentration based alternative standard that represents the performance limits of combustion and non-combustion control technologies for low-HAP concentration airstreams. We did not propose to amend the alternative standard and are not making any amendments to the alternative standard in this action.

Comment: Two commenters responded to the EPA's request for comment about whether existing facilities would need additional time to comply with the proposed revised back-end CPV standards. One commenter stated that the EPA should not extend the compliance deadline, asserting that such an extension would contravene the CAA's provisions stating that CAA section 112 standards become effective upon promulgation. The commenter also noted that sources would be in compliance with the more stringent 2014 standard by October 2017, and CAA section 307(d)(7)(B) provides that the EPA shall not delay the effective date of a regulation more than 3 months pending reconsideration. Another commenter recommended that all existing sources impacted by any of the proposed emission limits, definitions, and work practice standards have an additional year to meet the proposed compliance requirements. The commenter stated that facilities would need time to further evaluate the impact of the rule change, evaluate and/or modify its compliance strategy, and implement the compliance measures.

Response: Pursuant to CAA section 112(i)(3)(A), the Agency is establishing a compliance date of 1 year from the promulgation date of the final standards for back-end CPVs at existing sources. We are establishing this compliance date with recognition that the original October 2017 compliance date has already passed, that several state agencies have already given sources 1 year compliance date extensions, and that the amended emissions standard for back-end CPVs at existing sources changes the numerical emission limitation. After promulgation of these standards, facility owners or operators will require time to reevaluate compliance options, potentially revise compliance strategies, and implement the strategies, which the EPA anticipates will entail the purchase and installation of emissions control devices at two sources. We are providing 1 year to allow for this evaluation and implementation, which we consider as expeditious as practicable given the need to evaluate compliance options and the anticipated installation and initial compliance determination of emission control equipment in order to meet the standards in this final rule. Additionally, since we are revising the standards for front-end CPVs at existing facilities, we are also establishing the same compliance date as for the back-end CPVs at existing sources. The reasons for the revised compliance date for front-end CPVs at existing sources are the same as those for the back-end CPVs, except that the EPA anticipates that sources will not need to purchase and install emissions control devices to achieve the front-end CPV standard. Regardless of whether control devices will need to be employed to achieve the standards for front-end CPVs at existing sources, the numeric value and format of the standard is revised and owners or operators of sources subject to these revised standards will need to alter how they demonstrate compliance. For front-end CPVs, the standard is being revised from 1.9 pounds of HAP per ton of resin produced, as specified in the October 2014 rule, to less than a pound of HAP per hour standard as revised in this action. This is a logical outgrowth of the proposal's discussion of the considered options for front-end CPVs at existing sources, for which the Agency solicited comments which yielded no identification of other front-end vents and no substantive comments regarding the discussed possible standards. The need to establish an expeditious yet reasonable compliance date for a revised standard is reasonable in light of our revising the standard in both numeric value and units of measure. The revised compliance deadline for CPVs at existing sources being established in this action is specified at 40 CFR 63.1401(b). In contrast, for the storage vessel standard for periods of planned routine maintenance, the option to comply through a work practice standard would only require planning not substantially different from what is necessary to implement the planned routine maintenance of the emissions control system and would not require any additional equipment. Therefore, the EPA has determined that this storage vessel standard can be implemented by the compliance date previously established, and we are not amending this compliance date for the finalized storage vessel amendments in this final action.

The EPA disagrees with the commenter's opinion that providing additional time to comply with the revised CPV standards is unlawful under the CAA. Although it is true that CAA section 112 provides that standards ''shall be effective upon promulgation,'' the commenter overlooks the fact that CAA section 112(i)(3)(A) clearly provides the EPA discretion to establish an appropriate compliance period to follow the ''effective date'' of standards. Similarly, although CAA section 307(d)(7)(B) speaks of potential delays of the effectiveness of a standard following receipt of a petition of reconsideration, that provision has no relevance to the decision the Agency makes under CAA section 112(i)(3)(A) to establish a

compliance date following the promulgation of a standard.

Comment: One commenter noted there were several references in the proposed rule to 40 CFR 63.1405(b)(2)((i), (ii), and (iii), which were not included in the proposed rule language. The commenter also noted that there was no paragraph (i) or (ii) before 40 CFR 63.1413(h)(3)(ii)(B)(3)(iii). The commenter requested that the EPA correct the discrepancies and allow for an extended comment period on the technical corrections.

Response: The commenter is correct that several references to these paragraphs were included in the proposed rule language and that the paragraphs were not present in the proposed rule text. The paragraphs in which these references were located in the proposed rule text were 40 CFR 63.1413(c)(5), (c)(6), (h)(1)(i), (h)(3)(ii)(B)(4), and (h)(3)(iii), and 40 CFR 63.1416(f)(5) and (f)(6), and 40 CFR 63.1417(f)(15). In the final rule language, we have corrected this discrepancy by revising 40 CFR 63.1405(b) and including standards for reactor and non-reactor front-end CPVs at existing sources in 40 CFR 63.1405(b)(2)(ii) and (iii). We did not propose rule language for these front-end CPVs because we were taking comment on whether it would be appropriate to establish front-end CPV standards at existing sources for the source category and the associated value of the standard if there were front-end CPVs, other than the two we had identified, at existing affected sources. In the proposal, we discussed what the standard would be based on information available to the EPA at the time and provided a memorandum in the docket regarding calculation of the MACT floor and beyond-the-floor analysis. As no comments were received regarding additional front-end CPVs, and no other information indicates there are other existing source front-end CPVs in the source category, we have included the standards for front-end CPVs in the final rule. These standards are based on the existing information available to the EPA, as discussed at proposal. We have also corrected the numbering for 40 CFR 63.1413(h)(3)(ii)(B)(3). As the levels of the front-end CPV standards now included in the rule language were explained in our proposal, and no comments on the standards were received, we are not providing additional time for comment on these provisions.

3. What are the final rule amendments and our associated rationale regarding CPV standards at existing sources?

The analyses regarding the emission standards for CPVs at existing source APR facilities has not changed since proposal, and our rationale for the standards are provided in the preamble for the proposed rule and in the responses to the comments presented above. For these reasons, we are finalizing the revised back-end CPV standards for existing sources of 8.6 pounds of HAP per ton of resin produced, as proposed in August 2017. We are also finalizing, for the reasons provided above, separate standards for reactor and non-reactor front-end CPVs at existing sources, as described in the August 2017 proposal. The standard for front-end reactor CPVs is 0.61 pounds of HAP per hour, and the standard for front-end non-reactor CPVs is 0.022 pounds of HAP per hour.

B. Planned Routine Maintenance of Emission Control Systems Used To Reduce HAP Emissions From Storage Vessels

1. What changes did we propose regarding planned routine maintenance of storage vessel emissions control systems?

In its petition for reconsideration of the October 2014 final rule, Georgia Pacific requested that the EPA reconsider the applicability of the storage vessel HAP emissions standards when the emission control system for the vent on a fixed roof storage vessel is shut down for planned routine maintenance. In response to this request, the EPA reviewed and re-evaluated the standards for storage vessels, and we proposed a separate work practice standard for storage vessels during periods of planned routine maintenance of the storage vessel control device in the August 2017 proposed amendments to 40 CFR part 63, subpart OOO. This proposed work practice would allow owners or operators to bypass the control device for up to 240 hours per year during planned routine maintenance of the emission control system, provided there are no working losses from the vessel. This proposed standard would apply to fixed roof storage vessels at new and existing APR sources and represents the MACT floor level of control.

2. What comments did we receive regarding the proposed standards for planned routine maintenance of storage vessel emissions control systems?

The following is a summary of the significant comments received on the proposed standards for planned routine maintenance of storage vessel emissions control systems and our responses to these comments.

Comment: One commenter stated that the EPA lacks authority to exempt sources from emissions standards during any period of time and asserted that the proposed work practice standard is merely an exemption for storage vessel emissions during control device planned routine maintenance. The commenter also asserted that the EPA has not met the statutory requirements specified in CAA section 112(h)(1)–(2) to authorize the Agency to issue a work practice standard rather than a numeric emission standard. The commenter further stated that the proposed work practice standards are not consistent with the requirements of CAA section 112(d), which sets forth requirements for determining the MACT floor and beyond-the-floor levels based on the emissions reductions achieved by the best performing similar sources. The commenter stated that the EPA has not determined the emissions achieved by the best performing sources or whether those sources have 240 hours of uncontrolled emissions annually. The commenter stated that the EPA failed to apply the CAA standards for beyond-the-floor determinations. On this point, the commenter noted that the EPA claims the use of carbon canisters for emissions control during storage vessel planned routine maintenance is achievable, but not cost effective, however, the EPA did not attempt to examine the benefits of reducing HAP during these periods. The commenter stated that the EPA did not disclose the data or methodology used in its estimate of 26 pounds per year per facility for routine maintenance emissions.

Response: First, there is no basis for the commenter's assertion that the proposed work practice standard is an exemption for storage vessel emissions during control device planned routine maintenance. The work practice standard establishes specific requirements that apply during up to 240 hours per year of planned routine maintenance of the control system. Specifically, the standard prohibits sources from increasing the level of material in the storage vessel during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance. This standard minimizes emissions by ensuring that no working losses occur during such time periods. Working losses are the loss of stock vapors as a result of filling a storage vessel and are the majority of uncontrolled emissions for storage vessels having significant

throughput. The proposed work practice standard does not allow working losses to occur. With working losses eliminated during this period, the only emissions that would occur are breathing losses (a.k.a. standing losses). Breathing losses occur due to the expansion and contraction of the vapor space in a fixed roof storage vessel from diurnal temperature changes and barometric pressure changes. Breathing losses occur without any change to the liquid level in the storage vessel. The breathing losses from a fixed roof storage vessel are small and highly variable because they are dependent upon the volume of the vapor space in the storage vessel and the meteorological conditions at the time.

Second, the storage vessel requirements in this rule were originally promulgated as CAA section 112(h) standards. The provisions establish two control options. One option is for the installation of a floating roof pursuant to 40 CFR part 63, subpart WW. This option is a combination of design, equipment, work practice, and operational standards. The other option is to install a conveyance system (pursuant to 40 CFR part 63, subpart SS) and route the emissions to a control device that achieves a 95-percent reduction in HAP emissions or that achieves a specific outlet HAP concentration. The second option is a combination of design standards, equipment standards, operational standards, and a percent reduction or outlet concentration. See the preamble to the original rulemaking for 40 CFR part 63, subpart OOO at 63 FR 68832 (12/14/1998) and the preamble to the HON at 57 FR 62608 (12/31/1992). In this action, we neither reopened nor accepted comment on the standards that apply during all periods other than the up to 240 hours of planned routine maintenance or any aspect of the original justification for the standards.

Third, the specific work practice requirement added in this action fulfills the purposes of section 112(h)(1) of the CAA, which calls on the Administrator to include requirements in work practice standards sufficient to assure the proper operation and maintenance of the design or equipment. The work practice standard added simply allows for the planned routine maintenance of the control device and minimizes emissions during such periods of planned routine maintenance, consistent with the requirements of CAA section 112(h)(1).

Fourth, the commenter did not provide any evidence to show that there is a methodology that could be applied to breathing losses from a fixed roof storage vessel that would be technologically and economically practicable. We have determined that it is not practicable due to technological and economic limitations, to apply measurement methodology to measure breathing losses from storage vessels during periods of planned routine maintenance. We have concluded that it would not be technically and economically practicable to measure breathing loss emissions with any degree of certainty to establish a numeric limit based upon the best performing sources because of the nature of the breathing losses. The breathing losses during the planned routine maintenance of the control system are highly dependent on the volume of the vapor space and the weather conditions during that time. It would be impractical to plan to test a storage vessel during the 10 days per year that have the both the weather conditions and the vapor space volume that would result in the most breathing losses. Specialized flow meters (such as mass flowmeters) would likely be needed in order to accurately measure any flow during these variable, no to low flow conditions. Measurement costs for these no to low flow durations of time would be economically impracticable, particularly in light of the small quantity of emissions. We have used AP–42 emissions estimate equations to estimate 10 days of breathing losses. See ''Addendum to National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category'' in the docket for this rule. We estimate that it would cost approximately $25,000 for three 1-hour testing runs on a single day. We calculated these costs based on industry average costs of deploying qualified individuals for a day and costs of performing the necessary tests on required equipment to determine the concentration and emission rate of HAP. The extremely low flow rate present would require a greater degree of monitoring plan and quality assurance project plan development than is typical. Specialized equipment that is not typically available may be required to measure flow rates under these conditions. We are not aware of any measurement of breathing loss HAP emissions from a fixed roof storage vessel in the field.

In the proposed rule, we also evaluated whether a backup control device capable of achieving the 95-percent reduction standard would be cost effective at controlling the remaining breathing losses. In the proposal, we explained that the use of such back-up control devices is not cost effective. To respond to the commenter's concern about the disclosure of the data and methodologies used to calculate the breathing losses for assessing the cost effectiveness of controlling such emissions, in the memorandum titled ''Addendum to National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,'' we are providing a summary of the information used to calculate the breathing losses in the docket for this rule.

Therefore, we are finalizing the amendments to the storage vessel requirements, as proposed, allowing owners or operators of fixed roof vessels at new and existing affected APR sources to perform planned routine maintenance of the emission control system for up to 240 hours per year, provided there are no working losses from the vessel during that time.

Comment: One commenter supported the EPA's proposed work practice standards for storage vessels during planned routine maintenance of emission control systems. The commenter requested that the work practice standard also cover periods of malfunctions of the control device when it is temporarily incapable of controlling any emissions from the storage vessel. The commenter stated this would reduce the burden associated with required notifications of unpreventable failure of control equipment, which may not result in an exceedance of the emissions standard.

Response: While emissions from most equipment can be eliminated completely during routine maintenance of a control device, simply by not operating the process during those times, the same is not true for a storage vessel. The stored material in the vessel will continue to emit small amounts of volatile compounds due to breathing losses even when the control device is not operating. The only ways to avoid these emissions are to route the vapors from the stored material to another control device or to completely empty and degas the storage vessel prior to the maintenance activity. We proposed the 240 hour work practice standard to avoid having owners or operators empty and degas a storage vessel prior to completing planned routine maintenance, as this activity results in higher emissions than the small amounts of breathing losses that would result during the time the control device was not operating. While this work

practice requirement prevents higher emissions than would result from the planned emptying and degassing activity that may take place prior to planned routine maintenance of a control device, the same emissions would not be avoided in the event of a malfunction. As malfunctions are not planned events, an owner or operator would not empty and degas a storage vessel prior to the malfunction. Since emissions would not be reduced and would possibly increase by including malfunctions in the work practice standard, we do not agree that it is not appropriate to include malfunctions in the standard. Consequently, the final rule does not adopt the commenter's suggestion.

Comment: One commenter requested that the EPA revise the proposed storage vessel control requirements to explicitly allow emissions to be routed to a process for re-use as a raw material rather than just to a control or recovery device, to be more consistent with the similar provisions contained in the HON.

Response: The standards in 40 CFR 63.1404(a)(1) refer to 40 CFR part 63, subpart SS, for storage vessel control requirements, stating, ''Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process).'' The requirements of 40 CFR part 63, subpart SS, also include the ability to meet storage vessel emissions standards by routing emissions through a closed vent system to a fuel gas system or a process, which has been an option for control of storage vessel emissions meeting the standards of 40 CFR 63.1404(a)(1). We have revised 40 CFR 63.1404(a)(1) to clarify that compliance with the standards of 40 CFR 63.1404(a)(1) can be achieved by following the requirements of 40 CFR part 63, subpart SS, for routing emissions through a closed vent system to a fuel gas system or a process, which are included in the provisions and the title of the subpart. This clarification achieves the same result as the commenter's suggestion.

3. What are the final rule amendments and our associated rationale regarding the standards for planned routine maintenance of storage vessel emissions control systems?

The analysis of the alternative work practice standards for storage vessels at new and existing APR facilities during planned routine maintenance of emission control systems has not changed since proposal. Therefore, for the reasons provided above, as well as in the preamble for the proposed rule, the EPA is finalizing, with minor clarifications, the proposed work practice standards for these periods of time. The work practice standards will permit owners or operators of fixed roof storage vessels at new and existing affected APR sources to bypass the emission control system for up to 240 hours per year during planned routine maintenance of the emission control system, provided there are no working losses from the fixed roof storage vessel. To prevent HAP emissions from working losses, owners or operators complying with the alternative work practice standards will not be permitted to add material to the storage vessel during control device planned routine maintenance periods.

We are making two minor clarifications to the requirements for storage vessels during planned routine maintenance of emission control systems. In this final rule, we have revised 40 CFR 63.1404(a)(1) to clarify that compliance with the standards of 40 CFR 63.1404(a)(1) can be achieved by following the requirements of 40 CFR part 63, subpart SS, for routing emissions through a closed vent system to a fuel gas system or a process. This revision will apply during times of normal operation, as well as during planned routine maintenance of the storage vessel emissions control system. We have also added language to the recordkeeping and reporting requirements in 40 CFR 63.1416(g)(6) and 40 CFR 63.1417(f)(16) for storage vessel control device planned routine maintenance. These requirements were inadvertently omitted from the proposed rule text.

C. Technical Corrections

In this rulemaking, we are making five technical corrections to improve the clarity of the APR NESHAP requirements.

First, the original APR NESHAP, promulgated in January 2000 (65 FR 3276), incorporated three voluntary consensus standards (VCS) by reference, as specified in 40 CFR 63.14. However, while the paragraphs in 40 CFR 63.14 for these three VCS include references to the NESHAP for which they are approved to be used, these references omit citations to 40 CFR 63, subpart OOO. In 40 CFR 63.14, we are adding citations to 40 CFR 63.1402 and 40 CFR 63.1412 for the following consensus standards: American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks; American Society for Testing and Materials Method D2879–83; and American Society for Testing and Materials Method D1946–90.

Second, we are also correcting a citation reference to 40 CFR 63.1413(d)(6)(iii)(A) in 40 CFR 63.1417(3)(9). The correct citation is to 40 CFR 63.1414(d)(6)(iii)(A).

Third, at 40 CFR 63.1403(a) and 40 CFR 63.1405(a)(2), we are correcting the reference to the title of 40 CFR part 63, subpart SS, *i.e.,* ''National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.''

Fourth, at 40 CFR 63.1412(g)(2)(ii), we are adding the phrase ''(Reapproved 1994) (incorporated by reference, see § 63.14)'' immediately following ''American Society for Testing and Materials D1946–90.''

Fifth, at 40 CFR 63.1404(c) and 40 CFR 63.1416(g)(6)(iii), we are replacing the undefined term ''tank'' with the defined term ''storage vessel.''

IV. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

We estimate that 11 to 16 existing sources will be affected by one or more of the revised requirements being finalized in this action. We expect one existing source will be subject to the revised front-end and back-end CPV requirements, one existing source will be subject to the revised front-end CPV requirements, and three existing sources will be subject to the back-end CPV requirements. We expect four of these five existing sources (and an additional six to 11 sources) will be able to take advantage of the storage vessel work practice standards during periods of planned routine maintenance of an emission control system that is used to comply with emissions standards for vents on fixed roof storage vessels.

B. What are the air quality impacts?

We are finalizing a revised standard of 8.6 pounds of HAP per ton of resin produced for back-end CPVs at existing sources. We project the final standard will result in an estimated reduction of 207 tons of HAP per year beyond the January 2000 APR MACT standards, based on compliance with the alternative standard of 20 parts per million by volume for combustion control using RTOs. We estimate that the October 2014 rule would have required HAP emission reductions of 271 tons per year from CPVs at existing sources. We are also finalizing a standard of 0.61 pounds of HAP per

hour for front-end reactor CPVs at existing sources and a standard of 0.022 pounds of HAP per hour for front-end non-reactor CPVs at existing sources. The front-end CPVs are anticipated to be able to meet the emission standards without additional controls, and we project that these final standards will not result in HAP emission reductions beyond the January 2000 APR MACT standards.

We are finalizing work practice standards to address emissions during periods of storage vessel emissions control system planned routine maintenance. The standards require that storage vessels not be filled during these times, which eliminates working losses, and limit the amount of time allowed annually for use of this work practice. We anticipate the revised work practice standards will reduce HAP emissions from those allowed under the January 2000 APR MACT standards by preventing working losses and limiting the annual duration of the maintenance period for which the work practice can be used, resulting in an estimated decrease of 0.9 tons of HAP per year per facility beyond the January 2000 APR MACT standards. When compared to the October 2014 rule, which required compliance with the storage vessel emissions standards at all times, including during times of planned routine maintenance of the emissions control system, the HAP emissions reduction may be slightly less than the 0.08 tons of HAP per year projected under the 2014 final rule.

C. What are the cost impacts?

For back-end CPVs at existing affected sources, we are finalizing a revised standard of 8.6 pounds of HAP per ton of resin produced. We project that back-end CPVs at two existing affected sources will require emissions controls to meet the revised standard. For cost purposes, we assumed that each facility would install an RTO. Based on discussions with Georgia-Pacific and Tembec, we understand that the facilities are exploring other options, such as process changes, that may be more cost effective. However, the technical feasibility and potential costs of these options are currently unknown, and our estimate of compliance costs, assuming the use of RTOs, is based on the best information available. We estimate the nationwide capital costs to be $4.8 million and annualized costs to be $2.1 million per year. These costs are incremental to those of the 2000 rule, which did not regulate CPVs at existing sources. Compared to our revised estimate of the October 2014 rule costs of $9.6 million in capital costs and annualized costs of $4.2 million,[1] the revised standard represents an approximate 50-percent reduction in industry-wide costs. For front-end CPVs, we anticipate compliance with the emissions standards to be met without additional control, and we estimate there will be no capital or annualized costs associated with achieving these standards.

We estimated the nationwide annualized cost reductions associated with the final work practice standards for periods of planned routine maintenance of an emission control system that is used to comply with emissions standards for vents on fixed roof storage vessels. Compared to our revised cost estimate of the October 2014 rule,[2] the final storage vessel work practice standards result in an annualized cost reduction for each facility of $830 per year, which includes a capital cost reduction of $1,600. We estimate the nationwide annualized cost reduction to be up to $12,450 per year based on an estimated 15 facilities.

D. What are the economic impacts?

We performed a national economic impact analysis for APR production facilities affected by this final rule. We anticipate that two existing affected sources would install RTOs to comply with this rule at a total annualized cost of $2.1 million (in 2014$) per year compared to the January 2000 rule. These total annualized costs of compliance are estimated to be approximately 0.002 percent of sales. Accordingly, we do not project this final rule to have a significant economic impact on the affected entities.

The estimated total annualized cost of this final rule can also be compared to the estimated cost for the industry to comply with all provisions of the October 2014 rule. Based on information received since the October 2014 rule was finalized and the issues reconsidered in this action, we developed a revised estimate of the cost to comply with the 2014 final rule. We estimate the revised annualized cost of complying with the October 2014 rule to be $4.2 million per year.[3] Compared to this revised estimate of the cost of compliance with the October 2014 rule, this final rule will provide regulatory relief by reducing annualized compliance costs by $2.1 million in year 2014 dollars.

More information and details of this analysis, including the conclusions stated above, are provided in the technical document, ''Economic Impact Analysis for the Final Amendments to the NESHAP for Amino/Phenolic Resins,'' which is available in the rulemaking docket.

E. What are the benefits?

We estimate that this final rule will result in an annual reduction of 207 tons of HAP, compared to the January 2000 rule baseline. The EPA estimates this rule will result in 64 tons per year fewer HAP emission reductions than what the EPA projects the 2014 rule would achieve based on the additional information and test data that the EPA obtained following issuance of the 2014 final rule, as described in section III.A.1 of this preamble. We have not quantified or monetized the effects of these emissions changes for this rulemaking. See section IV.B of this preamble for discussion of HAP emissions from CPVs at existing sources under this final rule compared to the October 2014 rule.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review. Details on the estimated cost savings of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action, titled ''Economic Impact Analysis for the Final Amendments to the NESHAP for Amino/Phenolic Resins,'' and included in the docket of this rule.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. Details on the 13771 deregulatory figures of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action, titled ''Economic Impact Analysis for the Final Amendments to the NESHAP for

[1] See memorandum, ''National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,'' which is available in the rulemaking docket.

[2] Same as previous footnote.

[3] See Table 3 and Table 4 of the memorandum, ''National Impacts Associated with Final Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,'' which is available in the rulemaking docket.

Amino/Phenolic Resins,'' and included in the docket of this rule.

C. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1869.08. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

This final rule requires recordkeeping and reporting of occurrences when control devices used to comply with the storage vessel provisions undergo planned routine maintenance. Reporting of such occurrences are required to be disclosed in the Periodic Reports as specified at 40 CFR 63.1417.

Respondents/affected entities: The respondents affected by the amendments to 40 CFR part 63, subpart OOO, include, but are not limited to, facilities having a NAICS code 325211 (United States Standard Industrial Classification 2821). Facilities with a NAICS code of 325211 are described as Plastics Material and Resin Manufacturing establishments, which includes facilities engaged in manufacturing amino resins and phenolic resins, as well as other plastic and resin types.

Respondent's obligation to respond: Mandatory under sections 112 and 114 of the CAA.

Estimated number of respondents: 15.

Frequency of response: Once or twice per year.

Total estimated burden: 45 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $2,750 per year, including no annualized capital or operation and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. The EPA has identified no small entities that are subject to the requirements of 40 CFR 63, subpart OOO.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The EPA's risk assessments for the October 2014 rule (Docket ID No. EPA–HQ–OAR–2012–0133) demonstrate that the current regulations are associated with an acceptable level of risk and provide an ample margin of safety to protect public health and prevent adverse environmental effects. This final action does not alter those conclusions.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA is formalizing the incorporation of three technical standards that were included in the January 2000 rule for which the EPA had previously not formally requested the Office of the Federal Register to include in 40 CFR 63.14 with a reference back to the sections in 40 CFR 63, subpart OOO. These three standards were included in the original January 2000 rule. These three standards were already incorporated in 40 CFR 63.14, and were formally requested for other rules. These standards are API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989; ASTM D1946–90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography; and ASTM D2879–83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. API Publication 2517 is used to determine the maximum true vapor pressure of HAP in liquids stored at ambient temperature. API Publication 2517 is available to the public for free viewing online in the Read Online Documents section on API's website at *https://publications.api.org.* In addition to this free online viewing availability on API's website, hard copies and printable versions are available for purchase from API. ASTM D2879 is also used to determine the maximum true vapor pressure of HAP in liquids stored at ambient temperature. ASTM D1946 is used to measure the concentration of carbon monoxide and hydrogen in a process vent gas stream. ASTM D2879 and ASTM D1946 are available to the public for free viewing online in the Reading Room section on ASTM's website at *https://www.astm.org/READINGLIBRARY/.* In addition to this free online viewing availability on ASTM's website, hardcopies and printable versions are available for purchase from ASTM. Additional information can be found at *http://www.api.org/*and *https://www.astm.org/Standard/standards-and-publications.html.*

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does *not* have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). In the October 2014 rule, the EPA determined that the current health risks posed by emissions from these source categories are acceptable and provide an ample margin of safety to protect public health and prevent adverse environmental effects. This final action does not alter the conclusions made in the October 2014 rule regarding these analyses.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

Dated: October 4, 2018.

Andrew R. Wheeler,

Acting Administrator.

Accordingly, 40 CFR part 63 is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 63.14 is amended by revising paragraphs (e)(1), (h)(17), and (h)(27) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(e) * * *

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for §§ 63.111, 63.1402, and 63.2406.

* * * * *

(h) * * *

(17) ASTM D1946–90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§ 63.11(b) and 63.1412.

* * * * *

(27) ASTM D2879–83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§ 63.111, 63.1402, 63.2406, and 63.12005.

* * * * *

Subpart OOO—National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins

■ 3. Section 63.1400 is amended by revising paragraph (b)(4) to read as follows:

§ 63.1400 Applicability and designation of affected sources.

* * * * *

(b) * * *

(4) Equipment that does not contain organic hazardous air pollutants (HAP) and is located within an APPU that is part of an affected source;

* * * * *

■ 4. Section 63.1401 is amended by revising paragraph (b) to read as follows:

§ 63.1401 Compliance schedule.

* * * * *

(b) Existing affected sources shall be in compliance with this subpart (except §§ 63.1404, 63.1405, and 63.1411(c)) no later than 3 years after January 20, 2000. Existing affected sources shall be in compliance with the storage vessel requirements of § 63.1404 and the pressure relief device monitoring requirements of § 63.1411(c) by October 9, 2017. Existing affected sources shall be in compliance with the continuous process vent requirements of § 63.1405(b) by October 15, 2019.

* * * * *

■ 5. Section 63.1402 paragraph (b) is amended by:

■ a. Adding in alphabetical order definitions for ''Back-end continuous process vent'', ''Front-end continuous process vent'', ''Non-reactor process vent'', and ''Reactor process vent''; and

■ b. Removing the definitions for ''Non-reactor batch process vent'' and ''Reactor batch process vent''

The additions read as follows:

§ 63.1402 Definitions.

* * * * *

(b) * * *

Back-end continuous process vent means a continuous process vent for operations related to processing liquid resins into a dry form. Back-end process operations include, but are not limited to, flaking, grinding, blending, mixing, drying, pelletizing, and other finishing operations, as well as latex and crumb storage. Back-end does not include storage and loading of finished product or emission points that are regulated under §§ 63.1404 or 63.1409 through 63.1411 of this subpart.

* * * * *

Front-end continuous process vent means a continuous process vent for operations in an APPU related to producing liquid resins, including any product recovery, stripping and filtering operations, and prior to any flaking or drying operations.

* * * * *

Non-reactor process vent means a batch or continuous process vent originating from a unit operation other than a reactor. Non-reactor process vents include, but are not limited to, process vents from filter presses, surge control vessels, bottoms receivers, weigh tanks, and distillation systems.

* * * * *

Reactor process vent means a batch or continuous process vent originating from a reactor.

* * * * *

■ 6. Section 63.1403 is amended by revising paragraph (a) to read as follows:

(a) *Provisions of this subpart.* Except as allowed under paragraph (b) of this section, the owner or operator of an affected source shall comply with the provisions of §§ 63.1404 through 63.1410, as appropriate. When emissions are vented to a control device or control technology as part of complying with this subpart, emissions shall be vented through a closed vent system meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or a process).

* * * * *

■ 7. Section 63.1404 is amended by revising paragraph (a)(1) introductory text and adding paragraph (c) to read as follows:

§ 63.1404 Storage vessel provisions.

(a) * * *

(1) Reduce emissions of total organic HAP by 95 weight-percent. Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or a process). When complying with the requirements of 40

CFR part 63, subpart SS, the following apply for purposes of this subpart:

* * * * *

(c) Whenever gases or vapors containing HAP are routed from a storage vessel through a closed-vent system connected to a control device used to comply with the requirements of paragraph (a) or (b) of this section, the control device must be operating except as provided for in paragraph (c)(1) or (2) of this section.

(1) The control device may only be bypassed for the purpose of performing planned routine maintenance of the control device. When the control device is bypassed, the owner or operator must comply with paragraphs (c)(1)(i) through (iii) of this section.

(i) The control device may only be bypassed when the planned routine maintenance cannot be performed during periods that storage vessel emissions are vented to the control device.

(ii) On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.

(iii) The level of material in the storage vessel shall not be increased during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance.

(2) The gases or vapors containing HAP are routed from the storage vessel through a closed-vent system connected to an alternate control device meeting the requirements of paragraph (a)(1) or the alternative standard in paragraph (b) of this section.

■ 8. Section 63.1405 is amended by:
■ a. Revising paragraphs (a) introductory text and paragraph (a)(2) introductory text;
■ b. Removing paragraph (a)(3);
■ c. Revising paragraph (b); and
■ d. Adding paragraph (c).

The revisions and additions read as follows:

§ 63.1405 Continuous process vent provisions.

(a) *Emission standards for new affected sources.* For each continuous process vent located at a new affected source with a Total Resource Effectiveness (TRE) index value, as determined following the procedures specified in § 63.1412(j), less than or equal to 1.2, the owner or operator shall comply with either paragraph (a)(1) or (2) of this section. As an alternative to complying with paragraph (a) of this section, an owner or operator may comply with paragraph (c)(1) of this section.

* * * * *

(2) Reduce emissions of total organic HAP by 85 weight-percent. Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or process). When complying with the requirements of 40 CFR part 63, subpart SS, the following apply for purposes of this subpart:

* * * * *

(b) *Emission standards for existing affected sources.* For each continuous process vent located at an existing affected source, the owner or operator shall comply with either paragraph (b)(1) or (2) of this section. As an alternative to complying with paragraph (b) of this section, an owner or operator may comply with paragraph (c)(2) of this section.

(1) Vent all emissions of organic HAP to a flare.

(2) Reduce emissions as specified in paragraphs (b)(2)(i) through (iii) of this section, as applicable.

(i) The owner or operator of a back-end continuous process vent shall reduce total organic HAP emissions to less than or equal to 4.3 kilograms of total organic HAP per megagram of resin produced (8.6 pounds of total organic HAP per ton of resin produced).

(ii) The owner or operator of a front-end reactor continuous process vent shall reduce total organic HAP emissions to less than or equal to 0.28 kilograms of total organic HAP per hour (0.61 pounds of total organic HAP per hour).

(iii) The owner or operator of a front-end non-reactor continuous process vent shall reduce total organic HAP emissions to less than or equal to 0.010 kilograms of total organic HAP per hour (0.022 pounds of total organic HAP per hour).

(c) *Alternative emission standards.* As an alternative to complying with paragraphs (a) or (b) of this section, an owner or operator may comply with paragraph (c)(1) or (2) of this section, as appropriate.

(1) For each continuous process vent located at a new affected source, the owner or operator shall vent all organic HAP emissions from a continuous process vent meeting the TRE value specified in paragraph (a) of this section to a non-flare combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any continuous process vents that are not vented to a control device meeting these conditions shall be controlled in accordance with the provisions of paragraph (a)(1) or (2) of this section.

(2) For each continuous process vent located at an existing affected source, the owner or operator shall vent all organic HAP emissions from a continuous process vent to a non-flare combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any continuous process vents that are not vented to a control device meeting these conditions shall be controlled in accordance with the provisions of paragraph (b)(1) or (2) of this section.

■ 9. Section 63.1412 is amended by revising paragraphs (a), (g)(2)(ii), and (k)(2) to read as follows:

§ 63.1412 Continuous process vent applicability assessment procedures and methods.

(a) *General.* The provisions of this section provide procedures and methods for determining the applicability of the control requirements specified in § 63.1405(a) to continuous process vents.

* * * * *

(g) * * *

(2) * * *

(ii) American Society for Testing and Materials D1946–90 (Reapproved 1994) (incorporated by reference, see § 63.14) to measure the concentration of carbon monoxide and hydrogen.

* * * * *

(k) * * *

(2) If the TRE index value calculated using engineering assessment is less than or equal to 4.0, the owner or operator is required either to perform the measurements specified in paragraphs (e) through (h) of this section for control applicability assessment or comply with the control requirements specified in § 63.1405(a).

* * * * *

■ 10. Section 63.1413 is amended by:
■ a. Revising paragraph (a) introductory text;
■ b. Adding paragraph (a)(1)(iii);
■ c. Revising paragraphs (a)(3) introductory text, (a)(4) introductory text, and paragraphs (c)(2) and (c)(4) through (6);
■ d. Adding paragraph (c)(7);
■ e. Revising paragraphs (f) and (h)(1);
■ f. Redesignating paragraph (h)(2) as (h)(3);
■ g. Adding new paragraph (h)(2);
■ h. Revising newly redesignated paragraphs (h)(3) introductory text

(h)(3)(i), (h)(3)(ii) introductory text, (h)(3)(ii)(B)(*1*) and (*3*), and (h)(3)(iii);
■ i. Adding paragraph (h)(4);
■ j. Revising paragraphs (i)(1)(iii) and (iv); and
■ k. Adding paragraph (i)(1)(v).

The revisions and additions read as follows:

§ 63.1413 Compliance demonstration procedures.

(a) *General.* For each emission point, the owner or operator shall meet three stages of compliance, with exceptions specified in this subpart. First, the owner or operator shall conduct a performance test or design evaluation to demonstrate either the performance of the control device or control technology being used or the uncontrolled total organic HAP emissions rate from a continuous process vent. Second, the owner or operator shall meet the requirements for demonstrating initial compliance (*e.g.,* a demonstration that the required percent reduction or emissions limit is achieved). Third, the owner or operator shall meet the requirements for demonstrating continuous compliance through some form of monitoring (*e.g.,* continuous monitoring of operating parameters).

* * * * *

(1) * * *

(iii) *Uncontrolled continuous process vents.* Owners or operators are required to conduct either a performance test or a design evaluation for continuous process vents that are not controlled through either a large or small control device.

* * * * *

(3) *Design evaluations.* As provided in paragraph (a) of this section, a design evaluation may be conducted to demonstrate the organic HAP removal efficiency for a control device or control technology, or the uncontrolled total organic HAP emissions rate from a continuous process vent. As applicable, a design evaluation shall address the organic HAP emissions rate from uncontrolled continuous process vents, the composition and organic HAP concentration of the vent stream(s) entering a control device or control technology, the operating parameters of the emission point and any control device or control technology, and other conditions or parameters that reflect the performance of the control device or control technology or the organic HAP emission rate from a continuous process vent. A design evaluation also shall address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs (a)(3)(i) through (vi) of this section, for controlled vent streams, depending on the type of control device that is used. If the vent stream(s) is not the only inlet to the control device, the efficiency demonstration also shall consider all other vapors, gases, and liquids, other than fuels, received by the control device.

* * * * *

(4) *Establishment of parameter monitoring levels.* The owner or operator of a control device that has one or more parameter monitoring level requirements specified under this subpart, or specified under subparts referenced by this subpart, shall establish a maximum or minimum level, as denoted on Table 4 of this subpart, for each measured parameter using the procedures specified in paragraph (a)(4)(i) or (ii) of this section. Except as otherwise provided in this subpart, the owner or operator shall operate control devices such that the hourly average, daily average, batch cycle daily average, or block average of monitored parameters, established as specified in this paragraph, remains above the minimum level or below the maximum level, as appropriate.

* * * * *

(c) * * *

(2) Initial compliance with § 63.1405(a)(1) or (b)(1) (venting of emissions to a flare) shall be demonstrated following the procedures specified in paragraph (g) of this section.

* * * * *

(4) Continuous compliance with § 63.1405(a)(1) or (b)(1) (venting of emissions to a flare) shall be demonstrated following the continuous monitoring procedures specified in § 63.1415.

(5) Initial and continuous compliance with the production-based emission limit specified in § 63.1405(b)(2)(i) shall be demonstrated following the procedures in paragraph (h)(1) of this section.

(6) Initial and continuous compliance with the emission rate limits specified in § 63.1405(b)(2)(ii) and (iii) shall be demonstrated following the procedures of either paragraphs (c)(6)(i) or (ii) of this section.

(i) Continuous process vents meeting the emission rate limit using a closed vent system and a control device or recovery device or by routing emissions to a fuel gas system or process shall follow the procedures in 40 CFR part 63, subpart SS. When complying with the requirements of 40 CFR part 63, subpart SS, the following apply for purposes of this subpart:

(A) The requirements specified in of § 63.1405 (a)(2)(i) through (viii).

(B) When 40 CFR part 63, subpart SS refers to meeting a weight-percent emission reduction or ppmv outlet concentration requirement, meeting an emission rate limit in terms of kilograms of total organic HAP per hour shall also apply.

(ii) Continuous process vents meeting the emission rate limit by means other than those specified in paragraph (c)(6)(i) of this section shall follow the procedures specified in paragraph (h)(2) of this section.

(7) Initial and continuous compliance with the alternative standards specified in § 63.1405(c) shall be demonstrated following the procedures in paragraph (f) of this section.

* * * * *

(f) *Compliance with alternative standard.* Initial and continuous compliance with the alternative standards in §§ 63.1404(b), 63.1405(c), 63.1406(b), 63.1407(b)(1), and 63.1408(b)(1) are demonstrated when the daily average outlet organic HAP concentration is 20 ppmv or less when using a combustion control device or 50 ppmv or less when using a non-combustion control device. To demonstrate initial and continuous compliance, the owner or operator shall follow the test method specified in § 63.1414(a)(6) and shall be in compliance with the monitoring provisions in § 63.1415(e) no later than the initial compliance date and on each day thereafter.

* * * * *

(h) * * *

(1) Each owner or operator complying with the mass emission limit specified in § 63.1405(b)(2)(i) shall determine initial compliance as specified in paragraph (h)(1)(i) of this section and continuous compliance as specified in paragraph (h)(1)(ii) of this section.

(i) *Initial compliance.* Initial compliance shall be determined by comparing the results of the performance test or design evaluation, as specified in paragraph (a)(1) of this section, to the mass emission limit specified in § 63.1405(b)(2)(i).

(ii) *Continuous compliance.* Continuous compliance shall be based on the daily average emission rate calculated for each operating day. The first continuous compliance average daily emission rate shall be calculated using the first 24-hour period or otherwise-specified operating day after the compliance date. Continuous compliance shall be determined by comparing the daily average emission rate to the mass emission limit specified in § 63.1405(b)(2)(i).

(2) As required by paragraph (c)(6)(ii) of this section, each owner or operator

complying with the emission rate limits specified in § 63.1405(b)(2)(ii) and (iii), as applicable, by means other than those specified in paragraph (c)(6)(i) of this section, shall determine initial compliance as specified in paragraph (h)(2)(i) of this section and continuous compliance as specified in paragraph (h)(2)(ii) of this section.

(i) *Initial compliance.* Initial compliance shall be determined by comparing the results of the performance test or design evaluation, as specified in paragraph (a)(1) of this section, to the emission rate limits specified in § 63.1405(b)(2)(ii) and (iii), as applicable.

(ii) *Continuous compliance.* Continuous compliance shall be based on the hourly average emission rate calculated for each operating day. The first continuous compliance average hourly emission rate shall be calculated using the first 24-hour period or otherwise-specified operating day after the compliance date. Continuous compliance shall be determined by comparing the average hourly emission rate to the emission rate limit specified in § 63.1405(b)(2)(ii) or (iii), as applicable.

(3) *Procedures to determine continuous compliance with the mass emission limit specified in § 63.1405(b)(2)(i).*

(i) The daily emission rate, kilograms of organic HAP per megagram of product, shall be determined for each operating day using Equation 5 of this section:

$$ER = \frac{E_i}{RP_m} \qquad \text{[Eq.5]}$$

Where:

ER = Emission rate of organic HAP from continuous process vent, kg of HAP/Mg product.

E_i = Emission rate of organic HAP from continuous process vent i as determined using the procedures specified in paragraph (h)(3)(ii) of this section, kg/day.

RP_m = Amount of resin produced in one month as determined using the procedures specified in paragraph (h)(3)(iii) of this section, Mg/day.

(ii) The daily emission rate of organic HAP, in kilograms per day, from an individual continuous process vent (Ei) shall be determined. Once organic HAP emissions have been estimated, as specified in paragraph (h)(3)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs (h)(3)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology, the owner or operator may use the estimated organic HAP emissions (Ei) until the estimated organic HAP emissions are no longer representative due to a process change or other reason known to the owner or operator. If organic HAP emissions (Ei) are determined to no longer be representative, the owner or operator shall redetermine organic HAP emissions for the continuous process vent following the procedures in paragraph (h)(3)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs (h)(3)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology.

* * * * *

(B) * * *

(*1*) Uncontrolled organic HAP emissions shall be determined following the procedures in paragraph (h)(3)(ii)(A) of this section.

* * * * *

(*3*) Controlled organic HAP emissions shall be determined by applying the control device or control technology efficiency, determined in paragraph (h)(3)(ii)(B)(*2*) of this section, to the uncontrolled organic HAP emissions, determined in paragraph (h)(3)(ii)(B)(*1*) of this section.

(iii) The rate of resin produced, RP_M (Mg/day), shall be determined based on production records certified by the owner or operator to represent actual production for the day. A sample of the records selected by the owner or operator for this purpose shall be provided to the Administrator in the Precompliance Report as required by § 63.1417(d).

(4) *Procedures to determine continuous compliance with the emission rate limit specified in § 63.1405(b)(2)(ii) or (iii).*

(i) The hourly emission rate, kilograms of organic HAP per hour, shall be determined for each hour during the operating day using Equation 6 of this section:

$$E_H = K_2\left(\sum_{j=1}^{n} C_j M_j\right) Q_S \qquad \text{[Eq.6]}$$

Where:

E_H = Hourly emission rate of organic HAP in the sample, kilograms per hour.

K_2 = Constant, 2.494×10^{-6} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in the sample.

C_J = Organic HAP concentration on a dry basis of organic compound j in parts per million as determined by the methods specified in paragraph (h)(4)(ii) of this section.

M_j = Molecular weight of organic compound j, gram/gram-mole.

Q_S = Continuous process vent flow rate, dry standard cubic meters per minute, at a temperature of 20 °C, as determined by the methods specified in paragraph (h)(4)(ii) of this section.

(ii) The average hourly emission rate, kilograms of organic HAP per hour, shall be determined for each operating day using Equation 7 of this section:

$$AE = \frac{\sum_{i=1}^{n} E_H}{n} \qquad \text{[Eq.7]}$$

Where:

AE = Average hourly emission rate per operating day, kilograms per hour.

n = Number of hours in the operating day.

(ii) Continuous process vent flow rate and organic HAP concentration shall be determined using the procedures specified in § 63.1414(a), or by using the engineering assessment procedures in paragraph (h)(4)(iii) of this section.

(iii) *Engineering assessment.* For the purposes of determining continuous compliance with the emission rate limit specified in § 63.1405(b)(2)(ii) or (iii) using Equations 6 and 7, engineering assessments may be used to determine continuous process vent flow rate and organic HAP concentration. An engineering assessment includes, but is not limited to, the following examples:

(A) Previous test results, provided the tests are representative of current operating practices.

(B) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(C) Maximum volumetric flow rate or organic HAP concentration specified or implied within a permit limit applicable to the continuous process vent.

(D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to, the following:

(*1*) Estimation of maximum organic HAP concentrations based on process stoichiometry material balances or saturation conditions; and

(*2*) Estimation of maximum volumetric flow rate based on physical equipment design, such as pump or blower capacities.

* * * * *

(i) * * *

(1) * * *

(iii) Exceedance of the mass emission limit (*i.e.,* having an average value higher than the specified limit) monitored according to the provisions of paragraph (e)(2) of this section for batch process vents and according to the provisions of paragraph (h)(1) of this section for continuous process vents;

(iv) Exceedance of the organic HAP outlet concentration limit (*i.e.,* having an average value higher than the

specified limit) monitored according to the provisions of § 63.1415(e); and

(v) Exceedance of the emission rate limit (*i.e.,* having an average value higher than the specified limit) determined according to the provisions of paragraph (h)(2) of this section.

* * * * *

■ 11. Section 63.1415 is amended by revising paragraph (e) to read as follows:

§ 63.1415 Monitoring requirements.

* * * * *

(e) *Monitoring for the alternative standards.* For control devices that are used to comply with the provisions of § 63.1404(b), § 63.1405(c), § 63.1406(b), § 63.1407(b), or § 63.1408(b) the owner or operator shall conduct continuous monitoring of the outlet organic HAP concentration whenever emissions are vented to the control device. Continuous monitoring of outlet organic HAP concentration shall be accomplished using an FTIR instrument following Method PS–15 of 40 CFR part 60, appendix B. The owner or operator shall calculate a daily average outlet organic HAP concentration.

■ 12. Section 63.1416 is amended by:
■ a. Revising paragraphs (f)(1) and (3), (f)(5) introductory text, and (f)(5)(ii);
■ b. Adding paragraph (f)(5)(iii);
■ c. Redesignating paragraph (f)(6) as (f)(7);
■ d. Adding new paragraph (f)(6);
■ e. Revising newly redesignated paragraph (f)(7) introductory text and paragraph (g)(5)(v)(E); and
■ f. Adding paragraph (g)(6).

The revisions and additions read as follows:

§ 63.1416 Recordkeeping requirements.

* * * * *

(f) * * *

(1) *TRE index value records.* Each owner or operator of a continuous process vent at a new affected source shall maintain records of measurements, engineering assessments, and calculations performed according to the procedures of § 63.1412(j) to determine the TRE index value. Documentation of engineering assessments, described in § 63.1412(k), shall include all data, assumptions, and procedures used for the engineering assessments.

* * * * *

(3) *Organic HAP concentration records.* Each owner or operator shall record the organic HAP concentration as measured using the sampling site and organic HAP concentration determination procedures (if applicable) specified in § 63.1412(b) and (e), or determined through engineering assessment as specified in § 63.1412(k).

* * * * *

(5) If a continuous process vent is seeking to demonstrate compliance with the mass emission limit specified in § 63.1405(b)(2)(i), keep records specified in paragraphs (f)(5)(i) through (iii) of this section.

* * * * *

(ii) Identification of the period of time that represents an operating day.

(iii) The daily organic HAP emissions from the continuous process vent determined as specified in § 63.1413(h)(3).

(6) If a continuous process vent is seeking to demonstrate compliance with the emission rate limits specified in § 63.1405(b)(2)(ii) or (iii), keep records specified in paragraphs (f)(6)(i) through (iii) of this section.

(i) The results of the initial compliance demonstration specified in § 63.1413(h)(2)(i).

(ii) Identification of the period of time that represents an operating day.

(iii) The average hourly organic HAP emissions from the continuous process vent determined as specified in § 63.1413(h)(4).

(7) When using a flare to comply with § 63.1405(a)(1) or (b)(1), keep the records specified in paragraphs (f)(7)(i) through (f)(7)(iii) of this section.

* * * * *

(g) * * *

(5) * * *

(v) * * *

(E) The measures adopted to prevent future such pressure releases.

(6) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (g)(6)(i) through (iii) of this section, as applicable, for those planned routine maintenance operations that would require the control device not to meet the requirements of § 63.1404(a) or (b) of this subpart.

(i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of § 63.1404 (a) or (b) of this subpart, as applicable, due to planned routine maintenance.

(iii) For each storage vessel for which planned routine maintenance was performed during the previous 6 months, record the height of the liquid in the storage vessel at the time the control device is bypassed to conduct the planned routine maintenance and at the time the control device is placed back in service after completing the routine maintenance. These records shall include the date and time the liquid height was measured.

■ 13. Section 63.1417 is amended by:
■ a. Revising paragraphs (d) introductory text, (d)(8), (e)(1) introductory text, (e)(9), (f) introductory text, (f)(1) and (2), (f)(5) introductory text, and (f)(12)(ii);
■ b. Adding paragraphs (f)(14) through (16); and
■ c. Revising paragraph (h)(7) introductory text.

The revisions and additions read as follows:

§ 63.1417 Reporting requirements.

* * * * *

(d) *Precompliance Report.* Owners or operators of affected sources requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to use engineering assessment to estimate organic HAP emissions from a batch emissions episode as described in § 63.1414(d)(6)(i)(C); wishing to establish parameter monitoring levels according to the procedures contained in § 63.1413(a)(4)(ii); establishing parameter monitoring levels based on a design evaluation as specified in § 63.1413(a)(3); or following the procedures in § 63.1413(e)(2); or following the procedures in § 63.1413(h)(3), shall submit a Precompliance Report according to the schedule described in paragraph (d)(1) of this section. The Precompliance Report shall contain the information specified in paragraphs (d)(2) through (11) of this section, as appropriate.

* * * * *

(8) If an owner or operator is complying with the mass emission limit specified in § 63.1405(b)(2)(i), the sample of production records specified in § 63.1413(h)(3) shall be submitted in the Precompliance Report.

* * * * *

(e) * * *

(1) The results of any emission point applicability determinations, performance tests, design evaluations, inspections, continuous monitoring system performance evaluations, any other information used to demonstrate compliance, and any other information, as appropriate, required to be included

in the Notification of Compliance Status under 40 CFR part 63, subpart WW and subpart SS, as referred to in § 63.1404 for storage vessels; under 40 CFR part 63, subpart SS, as referred to in § 63.1405 for continuous process vents; under § 63.1416(f)(1) through (3), (f)(5)(i) and (ii), and (f)(6)(i) and (ii) for continuous process vents; under § 63.1416(d)(1) for batch process vents; and under § 63.1416(e)(1) for aggregate batch vent streams. In addition, each owner or operator shall comply with paragraphs (e)(1)(i) and (ii) of this section.

* * * * *

(9) Data or other information used to demonstrate that an owner or operator may use engineering assessment to estimate emissions for a batch emission episode, as specified in § 63.1414(d)(6)(iii)(A).

* * * * *

(f) *Periodic Reports.* Except as specified in paragraph (f)(12) of this section, a report containing the information in paragraph (f)(2) of this section or containing the information in paragraphs (f)(3) through (11) and (13) through (16) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180 day period. In addition, for equipment leaks subject to § 63.1410, the owner or operator shall submit the information specified in 40 CFR part 63, subpart UU, and for heat exchange systems subject to § 63.1409, the owner or operator shall submit the information specified in § 63.1409. Section 63.1415 shall govern the use of monitoring data to determine compliance for emissions points required to apply controls by the provisions of this subpart.

(1) Except as specified in paragraph (f)(12) of this section, a report containing the information in paragraph (f)(2) of this section or containing the information in paragraphs (f)(3) through (11) and (13) through (16) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(2) If none of the compliance exceptions specified in paragraphs (f)(3) through (11) and (13) through (16) of this section occurred during the 6-month period, the Periodic Report required by paragraph (f)(1) of this section shall be a statement that the affected source was in compliance for the preceding 6-month period and no activities specified in paragraphs (f)(3) through (11) and (13) through (16) of this section occurred during the preceding 6-month period.

* * * * *

(5) If there is a deviation from the mass emission limit specified in § 63.1406(a)(1)(iii) or (a)(2)(iii), § 63.1407(b)(2), or § 63.1408(b)(2), the following information, as appropriate, shall be included:

* * * * *

(12) * * *

(ii) The quarterly reports shall include all information specified in paragraphs (f)(3) through (11) and (13) through (16) of this section applicable to the emission point for which quarterly reporting is required under paragraph (f)(12)(i) of this section. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (f)(1) of this section.

* * * * *

(14) If there is a deviation from the mass emission limit specified in § 63.1405(b)(2)(i), the report shall include the daily average emission rate calculated for each operating day for which a deviation occurred.

(15) If there is a deviation from the emission rate limit specified in § 63.1405(b)(2)(ii) or (iii), the report shall include the following information for each operating day for which a deviation occurred:

(i) The calculated average hourly emission rate.

(ii) The individual hourly emission rate data points making up the average hourly emission rate.

(16) For periods of storage vessel routine maintenance in which a control device is bypassed, the owner or operator shall submit the information specified in § 63.1416(g)(6)(i) through (iii) of this subpart.

(h) * * *

(7) Whenever a continuous process vent becomes subject to control requirements under § 63.1405, as a result of a process change, the owner or operator shall submit a report within 60 days after the performance test or applicability assessment, whichever is sooner. The report may be submitted as part of the next Periodic Report required by paragraph (f) of this section.

* * * * *

[FR Doc. 2018–22395 Filed 10–12–18; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2017–0311; FRL–9980–56]

Pyraclostrobin; Pesticide Tolerances

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes tolerances for residues of pyraclostrobin in or on multiple commodities which are identified and discussed later in this document. Interregional Research Project Number 4 (IR–4) requested these tolerances under the Federal Food, Drug, and Cosmetic Act (FFDCA).

DATES: This regulation is effective October 15, 2018. Objections and requests for hearings must be received on or before December 14, 2018, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2017–0311, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Michael Goodis, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *RDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers