

# MAJOR SOURCE OPERATING PERMIT

**PERMITTEE:** NOURYON FUNCTIONAL CHEMICALS, LLC

**FACILITY NAME:** NOURYON FUNCTIONAL CHEMICALS, LLC

**FACILITY/PERMIT NO.:** 503-5009

**LOCATION:** AXIS, MOBILE COUNTY, ALABAMA

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

**Issuance Date:** DRAFT

**Effective Date:** DRAFT

**Expiration Date:** DRAFT, 2025

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## General Permit Provisos

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<p><b>1. <u>Transfer</u></b></p> <p>This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1)(a)5.</p>	<p>Rule 335-3-16-.02(6)</p>
<p><b>2. <u>Renewals</u></b></p> <p>An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit.</p> <p>The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.</p>	<p>Rule 335-3-16-.12(2)</p>
<p><b>3. <u>Severability Clause</u></b></p> <p>The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.</p>	<p>Rule 335-3-16-.05(e)</p>
<p><b>4. <u>Compliance</u></b></p> <p>(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.</p> <p>(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.</p>	<p>Rule 335-3-16-.05(f)</p> <p>Rule 335-3-16-.05(g)</p>

## General Permit Provisos

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<p><b>5. <u>Termination for Cause</u></b></p> <p>This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.</p>	<p>Rule 335-3-16-.05(h)</p>
<p><b>6. <u>Property Rights</u></b></p> <p>The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>	<p>Rule 335-3-16-.05(i)</p>
<p><b>7. <u>Submission of Information</u></b></p> <p>The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>	<p>Rule 335-3-16-.05(j)</p>
<p><b>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></b></p> <p>No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.</p>	<p>Rule 335-3-16-.05(k)</p>
<p><b>9. <u>Certification of Truth, Accuracy, and Completeness:</u></b></p> <p>Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.</p>	<p>Rule 335-3-16-.07(a)</p>
<p><b>10. <u>Inspection and Entry</u></b></p> <p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:</p>	<p>Rule 335-3-16-.07(b)</p>

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<ul style="list-style-type: none"> <li>(a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;</li> <li>(b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;</li> <li>(c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;</li> <li>(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.</li> </ul>	
<b>11. <u>Compliance Provisions</u></b>	
<ul style="list-style-type: none"> <li>(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.</li> </ul>	Rule 335-3-16-.07(c)
<ul style="list-style-type: none"> <li>(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.</li> </ul>	
<b>12. <u>Compliance Certification</u></b>	
<p>A compliance certification shall be submitted annually by March 1<sup>st</sup> of each year, unless more frequent periods are specified according to the specific rule governing the source or required by the Department.</p>	Rule 335-3-16-.07(e)
<ul style="list-style-type: none"> <li>(a) The compliance certification shall include the following: <ul style="list-style-type: none"> <li>(1) The identification of each term or condition of this permit that is the basis of the certification;</li> <li>(2) The compliance status;</li> <li>(3) The method(s) or other means used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements);</li> <li>(4) Whether compliance has been continuous or intermittent;</li> <li>(5) Such other facts as the Department may require to determine the compliance status of the source;</li> </ul> </li> </ul>	

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- (b) The compliance certification shall be submitted to:

Alabama Department of Environmental Management  
Air Division  
P.O. Box 301463  
Montgomery, AL 36130-1463

and to:

Enforcement and Compliance Assurance Division  
EPA Region IV  
61 Forsyth Street, SW  
Atlanta, GA 30303

### 13. Reopening for Cause

Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:

- (a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.
- (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
- (c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

Rule 335-3-16-.13(5)

### 14. Additional Rules and Regulations

This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

§22-28-16(d), Code of Alabama 1975, as amended

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<p><b>15. <u>Equipment Maintenance or Breakdown</u></b></p> <p>(a) In case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:</p> <ol style="list-style-type: none"><li>(1) Identification of the specific facility to be taken out of service as well as its location and permit number;</li><li>(2) The expected length of time that the air pollution control equipment will be out of service;</li><li>(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;</li><li>(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;</li><li>(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.</li></ol> <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director will be notified when the breakdown has been corrected.</p>	<p>Rule 335-3-1-.07(1),(2)</p>
<p><b>16. <u>Operation of Capture and Control Devices</u></b></p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.</p>	<p>§22-28-16(d), <u>Code of Alabama 1975</u>, as amended</p>



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<p><b>17. <u>Obnoxious Odors</u></b></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p>	<p>Rule 335-3-1-.08</p>
<p><b>18. <u>Fugitive Dust</u></b></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:</p> <ol style="list-style-type: none"> <li>(1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; or</li> <li>(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; or</li> <li>(3) By paving; or</li> <li>(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions; or</li> <li>(5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.</li> </ol>	<p>Rule 335-3-4-.02</p>
<p><b>19. <u>Additions and Revisions</u></b></p> <p>Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.</p>	<p>Rule 335-3-16-.13 and .14</p>
<p><b>20. <u>Recordkeeping Requirements</u></b></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <ol style="list-style-type: none"> <li>(1) The date, place, and time of all sampling or measurements;</li> <li>(2) The date analyses were performed;</li> <li>(3) The company or entity that performed the analyses;</li> <li>(4) The analytical techniques or methods used;</li> </ol>	<p>335-3-16-.05(c)2.</p>

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<p>(5) The results of all analyses; and</p> <p>(6) The operating conditions that existed at the time of sampling or measurement.</p> <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.</p>	
<p><b>21. <u>Reporting Requirements</u></b></p> <p>(a) Reports to the Department of any required monitoring shall be submitted at least every six months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).</p> <p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p>	<p>Rule 335-3-16-.05(c)(3)</p>
<p><b>22. <u>Emission Testing Requirements</u></b></p> <p>Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.</p> <p>To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:</p> <p>(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.</p>	<p>Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)</p> <p>Rule 335-3-1-.04</p>

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<p>(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).</p> <p>(c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.</p> <p>(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances</p> <p>A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	<p>Rule 335-3-1-.04</p>
<p><b>23. <u>Payment of Emission Fees</u></b></p> <p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code r. 335-1-7-.04.</p>	<p>Rule 335-1-7-.04</p>
<p><b>24. <u>Other Reporting and Testing Requirements</u></b></p> <p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.</p>	<p>Rule 335-3-1-.04(1)</p>
<p><b>25. <u>Title VI Requirements (Refrigerants)</u></b></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.</p> <p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.</p>	<p>335-3-16-.05(a)</p>

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<p>The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.</p>	
<p><b>26. <u>Chemical Accidental Prevention Provisions</u></b></p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <ul style="list-style-type: none"> <li>(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.</li> <li>(b) The owner or operator shall submit one of the following: <ul style="list-style-type: none"> <li>(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or,</li> <li>(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.</li> </ul> </li> </ul>	<p>40 CFR Part 68</p>
<p><b>27. <u>Display of Permit</u></b></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will make the permit readily available for inspection by any or all persons who may request to see it.</p>	<p>Rule 335-3-14-.01(1)(d)</p>
<p><b>28. <u>Circumvention</u></b></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	<p>Rule 335-3-1-.10</p>
<p><b>29. <u>Visible Emissions</u></b></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>Rule 335-3-4-.01(1)</p>

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<b>30. <u>Fuel-Burning Equipment</u></b>	
<p>Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03(1).</p>	Rule 335-3-4-.03(1)
<p>Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.</p>	Rule 335-3-5-.01
<b>31. <u>Process Industries – General</u></b>	
<p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.</p>	Rule 335-3-4-.04
<b>32. <u>Averaging Time for Emission Limits</u></b>	
<p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.</p>	Rule 335-3-1-.05
<b>33. <u>Permit Shield</u></b>	
<p>A permit shield exists under this operating permit in accordance with ADEM Administrative Code R. 335-3-16-.10 in that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in Section 3 of the application for this permit. Under this shield, it has been determined that requirements listed as non-applicable in such section are not applicable to this source.</p>	Rule 335-3-16-.10
<b>34. <u>Compliance Assurance Monitoring (CAM)</u></b>	
<p>Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.</p>	
<p><b>(a) <u>Operation of Approved Monitoring</u></b></p>	40 CFR 64.7
<p>(1) Commencement of operation. The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).</p>	

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<p>(2) Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.</p> <p>(3) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p> <p>(4) Response to excursions or exceedances.</p> <p>(A) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.</p>	

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<p>(B) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.</p> <p>(5) Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.</p>	
<p><b>(b) Quality Improvement Plan (QIP) Requirements</b></p> <p>(1) Based on the results of a determination made under Section 34(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.</p> <p>(2) Elements of a QIP:</p> <p>(A) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.</p>	<p>40 CFR 64.8</p>

## General Permit Provisos

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<p>(B) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:</p> <ul style="list-style-type: none"> <li>(i) Improved preventive maintenance practices.</li> <li>(ii) Process operation changes.</li> <li>(iii) Appropriate improvements to control methods.</li> <li>(iv) Other steps appropriate to correct control performance.</li> <li>(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above).</li> </ul> <p>(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p> <p>(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 34(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:</p> <ul style="list-style-type: none"> <li>(A) Failed to address the cause of the control device performance problems; or</li> <li>(B) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.</li> </ul> <p>(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.</p>	



## General Permit Provisos

Federally Enforceable Provisos	Regulations
<p>(c) <b>Reporting and Recordkeeping Requirements</b></p> <p>(1) General reporting requirements</p> <p>(A) On and after the date specified in Section 34(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code r. 335-3-16-.05(c)3.</p> <p>(B) A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code r. 335-3-16-.05(c)3. and the following information, as applicable:</p> <p>(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;</p> <p>(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and</p> <p>(iii) A description of the actions taken to implement a QIP during the reporting period as specified in Section 34(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.</p> <p>(2) General recordkeeping requirements.</p> <p>(A) The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code r. 335-3-16-.05(c)2.. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 34(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).</p>	<p>40 CFR 64.9</p>

## General Permit Provisos

### Federally Enforceable Provisos

### Regulations

- (B) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
- (d) **Savings Provisions**
- (3) Nothing in this part shall:
- (A) Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- (B) Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- (C) Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

40 CFR 64.10

## Sulfuric Acid Plant

### Informational Summary

**Description:** Sulfuric Acid Production Unit (70,833 lb/hr) with Hydrogen Peroxide Scrubber

**Emission Unit:** 001

**Installation Date:** 1971

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

#### 40 CFR Part 60, Subpart H

Pollutants Emitted

<b>Emission Point No.</b>	<b>Point Description</b>	<b>Pollutant</b>	<b>Emission Limit</b>	<b>Standard</b>
AC-1	Hydrogen Peroxide Scrubber	SO <sub>2</sub>	2.5 lb/ton of 100% sulfuric acid produced (3-hour average)	335-3-14-.01(1)(g) & Civil Action No. 1:19-cv-00626
AC-1	Hydrogen Peroxide Scrubber	SO <sub>2</sub>	1.5 lb/ton of 100% sulfuric acid produced (365 day average)	335-3-14-.01(1)(g) & Civil Action No. 1:19-cv-00626
AC-1	Hydrogen Peroxide Scrubber	SO <sub>3</sub>	0.2 lb/ton of 100% sulfuric acid produced	335-3-5-.02
AC-1	Hydrogen Peroxide Scrubber	H <sub>2</sub> SO <sub>4</sub> Mist	0.15 lb/ton of 100% sulfuric acid produced	335-3-10-.02(6)
AC-1	Hydrogen Peroxide Scrubber	Opacity	10% opacity	335-3-10-.02(6)

## Sulfuric Acid Plant Provisos

Federally Enforceable Provisos	Regulations
<p><i>Applicability</i></p> <ol style="list-style-type: none"> <li>1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.</li> <li>2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.02, Sulfuric Acid Plants</li> <li>3. This source is subject to the applicable requirements of 40 CFR Part 60, Subpart H – Standards of Performance for Sulfuric Acid Plants.</li> <li>4. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart H.</li> <li>5. This source is subject to synthetic minor PSD emission limitations.</li> <li>6. This source is subject to Compliance Assurance Monitoring (CAM) requirements.</li> <li>7. This source is subject to requirements established pursuant to a negotiated Consent Decree: Civil Action No. 1:19-cv-00626 (effective November 21, 2019) with the United States of America (on behalf of the US EPA). The requirements established pursuant to the negotiated Consent Decree shall not be deleted or modified with the written approval of EPA.</li> </ol>	<p>ADEM Admin. Code r. 335-3-16-.03</p> <p>ADEM Admin. Code r. 335-3-5-.02</p> <p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>40 CFR Part 64</p> <p>Civil Action No. 1:19-cv-00626</p>
<p><i>Emission Standards</i></p> <ol style="list-style-type: none"> <li>1. The Hydrogen Peroxide Scrubber (AC-1) shall not emit sulfur dioxide (SO<sub>2</sub>) in excess of 2.5 lb of SO<sub>2</sub> per ton of 100% sulfuric acid produced, calculated on a 3-hour rolling average, except during startup, shutdown, and malfunction (SSM).</li> </ol>	<p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p>

## Sulfuric Acid Plant Provisos

### Federally Enforceable Provisos

#### *Emission Standards Continued*

2. During startup, the Hydrogen Peroxide Scrubber (AC-1) shall not emit sulfur dioxide (SO<sub>2</sub>) emissions in excess of the following:

3-Hour Time Period (Hours after Startup Commences)	Short-Term SO <sub>2</sub> Emission Limit (lbs per ton of 100% sulfuric acid produced)
1 <sup>st</sup> – 3 <sup>rd</sup>	15
2 <sup>nd</sup> – 4 <sup>th</sup>	15
3 <sup>rd</sup> – 5 <sup>th</sup>	15
4 <sup>th</sup> – 6 <sup>th</sup>	15
5 <sup>th</sup> – 7 <sup>th</sup>	15
6 <sup>th</sup> – 8 <sup>th</sup>	15
7 <sup>th</sup> – 9 <sup>th</sup>	15
8 <sup>th</sup> – 10 <sup>th</sup>	15
9 <sup>th</sup> – 11 <sup>th</sup>	15
10 <sup>th</sup> – 12 <sup>th</sup>	15
11 <sup>th</sup> – 13 <sup>th</sup>	12
12 <sup>th</sup> – 14 <sup>th</sup>	9
13 <sup>th</sup> – 15 <sup>th</sup>	6
14 <sup>th</sup> – 16 <sup>th</sup>	6
15 <sup>th</sup> – 17 <sup>th</sup>	6
16 <sup>th</sup> – 18 <sup>th</sup>	6
17 <sup>th</sup> – 19 <sup>th</sup>	6
18 <sup>th</sup> – 20 <sup>th</sup>	6
19 <sup>th</sup> – 21 <sup>st</sup>	6
20 <sup>th</sup> – 22 <sup>nd</sup>	6
21 <sup>st</sup> – 23 <sup>rd</sup>	6
22 <sup>nd</sup> – 24 <sup>th</sup>	6
23 <sup>rd</sup> – 25 <sup>th</sup>	4.8
24 <sup>th</sup> – 26 <sup>th</sup>	3.6

3. The Hydrogen Peroxide Scrubber (AC-1) shall not emit sulfur dioxide (SO<sub>2</sub>) in excess of 1.5 lb of SO<sub>2</sub> per ton of 100% sulfuric acid produced, as calculated on a 365-day average.
4. In accordance with ADEM Admin. Code r. 335-3-5-.02, the facility shall not emit any gases which contain sulfur trioxide (SO<sub>3</sub>) emissions in excess of 0.2 lb per ton of 100% sulfuric acid produced.

### Regulations

ADEM Admin. Code r.  
335-3-14-.01(1)(g) &  
Civil Action No.  
1:19-cv-00626

ADEM Admin. Code r.  
335-3-14-.01(1)(g) &  
Civil Action No.  
1:19-cv-00626

ADEM Admin. Code r.  
335-3-5-.02

## Sulfuric Acid Plant Provisos

Federally Enforceable Provisos	Regulations
<p><i>Emission Standards Continued</i></p> <ol style="list-style-type: none"> <li>5. In accordance with §60.83(a)(1), the Hydrogen Peroxide Scrubber (AC-1) shall not emit any gases which contain acid mist in excess of 0.075 kg per metric ton of 100% sulfuric acid produced (0.15 lb of acid mist per ton).</li> <li>6. In accordance with §60.83(a)(2), the Hydrogen Peroxide Scrubber (AC-1) shall not emit any gases which exhibit 10 percent opacity, or greater.</li> <li>7. In accordance with §60.11(d), the facility shall, at all times, including periods of startup, shutdown, and malfunction, maintain and operate the Sulfuric Acid Plant including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.</li> <li>8. The facility shall neither generate nor use any Consent Decree Emission Reductions: as netting reduction; as emissions offsets; or to apply for, obtain, trade, or sell any emission reduction credits. Baseline actual emissions for each unit and any plant-wide applicability limits (PALs) during any 24-month period selected by the facility shall be adjusted downward to exclude any portion of the baseline emissions that would have been eliminated as Consent Decree Emission Reductions had the facility been complying with this Consent Decree during that 24-month period.</li> </ol>	<p>ADEM Admin. Code r. 335-3-10-.02(6) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-10-.02(6)</p> <p>ADEM Admin. Code r. 335-3-10-.02(1) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p>
<p><i>Compliance and Performance Test Methods and Procedures</i></p> <ol style="list-style-type: none"> <li>1. Compliance with the sulfur dioxide (SO<sub>2</sub>) emission rate shall be determined by EPA Reference Method 8 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> <li>2. Compliance with the sulfur trioxide (SO<sub>3</sub>) emission rate shall be determined by EPA Reference Method 8 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> <li>3. Compliance with the sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) emission rate shall be determined by EPA Reference Method 8 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> </ol>	<p>ADEM Admin. Code r. 335-3-10-.03 &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-10-.03</p> <p>ADEM Admin. Code r. 335-3-10-.03</p>

## Sulfuric Acid Plant Provisos

Federally Enforceable Provisos	Regulations
<p><i>Compliance and Performance Test Methods and Procedures Continued</i></p> <p>4. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	<p>ADEM Admin. Code r. 335-3-10-.03</p>
<p><i>Emission Monitoring</i></p> <p>1. A continuous monitoring system for the measurement of sulfur dioxide (SO<sub>2</sub>) shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60, Appendix B and Appendix A of the Consent Decree (effective November 21, 2019), which is incorporated into this permit as Sulfuric Acid Plant with Hydrogen Peroxide Scrubber CEMS Plan (Appendix B). The monitoring methods specified in the CEMS Plan are deemed approved as appropriate alternative monitoring methods for purposes of NSPS, pursuant to §60.13(i).</p> <p>2. In order to demonstrate compliance with the sulfur dioxide (SO<sub>2</sub>) emission limit, the sulfur trioxide (SO<sub>3</sub>) emission limit, and the sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) emission limit the facility shall test the Hydrogen Peroxide Scrubber (AC-1) annually, before March 1 of each calendar year.</p> <p>3. In order to indicate compliance with the opacity standard, the facility shall inspect the Hydrogen Peroxide Scrubber (AC-1) for visible emissions at least once per calendar week, while the plant is operating. If any visible emissions are noted, the facility shall initiate corrective action within 24 hours.</p>	<p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>
<p><i>Recordkeeping and Reporting Requirements</i></p> <p>1. Pursuant to the CEMS Plan, the facility shall maintain records of the date, time, and duration that any of the three analyzers are not operating.</p> <p>2. As required by §60.7(d)(1), the facility shall submit a summary report form semiannually for the Hydrogen Peroxide Scrubber (AC-1). The report shall contain the information and be in the format shown in Figure 1 of §60.7(d).</p>	<p>ADEM Admin. Code r. 335-3-14-.01(1)(g) &amp; Civil Action No. 1:19-cv-00626</p> <p>ADEM Admin. Code r. 335-3-10-.02(1)</p>

## Sulfuric Acid Plant Provisos

### Federally Enforceable Provisos

### Regulations

#### *Recordkeeping and Reporting Requirements Continued*

3. As required by §60.7(d)(2), if the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the facility shall include an excess emissions report and a monitoring systems performance report with the submission of the summary report form. The excess emissions report and the monitoring system performance report shall contain the information required by §60.7(c)(1-4).

ADEM Admin. Code r.  
335-3-10-.02(1)

4. Records of the date, time, and results of the weekly visual emission inspections of the Hydrogen Peroxide Scrubber (AC-1) shall be maintained and shall be available for inspection for a period of five (5) years.

ADEM Admin. Code r.  
335-3-14-.04

5. The facility shall prepare and implement an Operation and Maintenance Plan (O&M Plan) for the Sulfuric Acid Plant. The O&M Plan shall describe the operating and maintenance procedures necessary to:

ADEM Admin. Code r.  
335-3-14-.01(1)(g) &  
Civil Action No.  
1:19-cv-00626

(a) minimize the frequency of Sulfuric Acid Plant shutdowns

(b) maintain and operate the Sulfuric Acid Plant, including associated air pollution control equipment, at all times, including during periods of SSM, in a manner consistent with good air pollution control practices for minimizing emissions.

The facility shall review, and update as necessary, the O&M Plan no less frequently than once every three years.



# Crystex® Plant

## Informational Summary

**Description:** Crystex® Production Unit

**Emission Unit:** 002

**Installation Date:** 1975

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
CX-2	Emergency Flare	N/A	N/A	N/A
CX-4	Crystex® Absorber Overhead Vent	SO <sub>2</sub>	18.26 lb/hr	335-3-14-.04
CX-5	Baghouse 5	PM	3.6 lb/hr (combined)	335-3-14-.04
CX-6	Baghouse 6			
CX-7	Baghouse 7			
CX-8	Baghouse 8			
All Points	Crystex® Plant	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	335-3-4-.01

## Crystex® Plant Provisos

Federally Enforceable Provisos	Regulations
<p><i>Applicability</i></p> <ol style="list-style-type: none"> <li>1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.</li> <li>2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.</li> <li>3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.</li> <li>4. This source is subject to synthetic minor PSD emission limitations.</li> </ol>	<p>ADEM Admin. Code r. 335-3-16-.03</p> <p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-4-.04(1)</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>
<p><i>Emission Standards</i></p> <ol style="list-style-type: none"> <li>1. In order to avoid Prevention of Significant Deterioration (PSD), the sulfur dioxide (SO<sub>2</sub>) emission rate from Crystex® Absorber Overhead Vent (CX-4) shall not exceed 18.6 lb/hr.</li> <li>2. The Crystex® Absorber Overhead Vent (CX-4) shall be routed to the Carbon Disulfide Tailgas Incinerator (CS-1).</li> <li>3. In order to avoid Prevention of Significant Deterioration (PSD), the combined particulate matter (PM) emission rate from the dust collectors (CX-5, CX-6, CX-7, and CX-8) shall not exceed 3.6 lb/hr.</li> <li>4. The particulate matter (PM) emission rate from the Crystex® Plant shall not exceed the amount determined by the following equations: <div style="text-align: center; margin: 10px 0;"> <math display="block">E = 3.59P^{0.62}</math> </div> <p>Where:    E = emission in lb/hr                     P = process load rate in tons/hr</p> </li> <li>5. Any source of particulate emissions shall not discharge into the atmosphere, particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, except for one six (6) minute period in any sixty (60) minute period of not greater than forty percent (40%).</li> </ol>	<p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-4-.04(1)</p> <p>ADEM Admin. Code r. 335-3-4-.01</p>

Federally Enforceable Provisos	Regulations
<p><i>Compliance and Performance Test Methods and Procedures</i></p> <ol style="list-style-type: none"> <li>1. Compliance with the sulfur dioxide (SO<sub>2</sub>) emission rate shall be determined by EPA Reference Method 6 or 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> <li>2. Compliance with the particulate matter (PM) emission rate shall be determined by EPA Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> <li>3. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</li> </ol>	<p>ADEM Admin. Code r. 335-3-10-.03</p> <p>ADEM Admin. Code r. 335-3-10-.03</p> <p>ADEM Admin. Code r. 335-3-10-.03</p>
<p><i>Emission Monitoring</i></p> <ol style="list-style-type: none"> <li>1. As an indicator of compliance with the sulfur dioxide (SO<sub>2</sub>) emission limit, the facility shall monitor the temperature of the stripper bottom associated with the Crystex® Absorber, while the unit is in operation. The daily average temperature of the stripper bottom shall be maintained at a value between 125°C - 165°C, or the temperature established during the most recent stack test that demonstrated compliance with the sulfur dioxide (SO<sub>2</sub>) emission limit. A sample reading should be measured and recorded at least once every two hours to calculate a daily average. If the daily average temperature is outside the above range, the facility shall initiate corrective action within 24 hours.</li> <li>2. As an indicator of compliance with the opacity and particulate matter (PM) emission limitations, the facility shall inspect the dust collectors (CX-5, CX-6, CX-7, and CX-8) for visible emissions at least once per week, while the unit is operating. If any visible emissions are noted, the facility shall initiate corrective action within 24 hours.</li> </ol>	<p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>
<p><i>Recordkeeping and Reporting Requirements</i></p> <ol style="list-style-type: none"> <li>1. Records of the daily average temperature and any corrective action performed for the stripper bottom shall be maintained and available for inspection for a period of five (5) years.</li> <li>2. Records of the date, time, and results of the weekly visible emission inspections, for the dust collectors (CX-5, CX-6, CX-7, and CX-8), shall be maintained and available for inspection for a period of five (5) years.</li> </ol>	<p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>

# Carbon Disulfide Plant

## Informational Summary

**Description:** Carbon Disulfide Plant with Claus Sulfur Recovery Unit (350 Tons/Day)

**Installation Date:** 1953

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

**40 CFR Part 63, Subpart F**

**40 CFR Part 63, Subpart G**

**40 CFR Part 63, Subpart H**

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
CS-1	Tailgas Incinerator (27.5 MMBtu/hr)	N/A	N/A	N/A
CS-2	Emergency Flare	N/A	N/A	N/A
CS-4A	Railcar Loading Condenser (West Condenser)	HAP	98% Reduction or 20 ppmv	335-3-11-.06(6)
CS-4B	Backup Railcar Loading Condenser (East Condenser)	HAP	98% Reduction or 20 ppmv	335-3-11-.06(6)
	Carbon Disulfide Plant Fugitives	HAP	HON, Subpart H LDAR Program	335-3-11-.06(6)
	Claus Unit Vent Stream – HON Group 2 Process Vent	HAP	Maintain a TRE > 1.0 in order to remain classified as a Group 2 process vent	335-3-11-.06(6)
All Points	Carbon Disulfide Plant	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	335-3-4-.01

## Carbon Disulfide Plant Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5), (6), and (7)
4. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions unless otherwise noted in Subparts F, G, or H.	ADEM Admin. Code r. 335-3-11-.06(1)
5. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
6. This source is subject to Compliance Assurance Monitoring (CAM) requirements.	40 CFR Part 64
<i>Emission Standards</i>	
1. As required by §63.126(a) and §63.126(b)(1), the facility shall equip the Group 1 transfer rack(s) with a vapor collection system and a control device (CS-4A and CS-4B) to reduce emissions of total organic hazardous air pollutants by 98% weight or to an exit concentration of 20 ppmv, whichever is less stringent..	ADEM Admin Code r. 335-3-11-.06(6)
2. As required by §63.126(e), the facility shall only load organic HAP’s into tank trucks and railcars which meet the following requirements:	ADEM Admin Code r. 335-3-11-.06(6)
(1) Have a current certification in accordance with the U.S. Department of Transportation pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or	
(2) Have been demonstrated to be vapor-tight within the preceding 12 months, as determined by the procedures in §63.128(f) of this subpart. Vapor-tight means that the truck or railcar tank will sustain a pressure change of not more than 750 pascals within 5 minutes after it is pressurized to a minimum of 4, 500 pascals.	

## Carbon Disulfide Plant Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
3. As required by §63.126(f), the facility shall only load organic HAP's into tank trucks or railcars equipped with vapor collection equipment that is compatible with the transfer rack's vapor collection system.	ADEM Admin Code r. 335-3-11-.06(6)
4. As required by §63.126(g), the facility shall only load organic HAP's in tank trucks or railcars whose collection systems are connected to the transfer rack's vapor collection systems.	ADEM Admin Code r. 335-3-11-.06(6)
5. As required by §63.126(h), the facility shall ensure that no pressure relief device in the transfer rack's vapor collection system or in the organic hazardous air pollutants loading equipment of each tank truck or railcar shall begin to open during loading, except pressure relief devices needed for safety purposes.	ADEM Admin Code r. 335-3-11-.06(6)
6. As required by §63.126(i), each valve in the vent system that would diver the vent stream to the atmosphere, either directly or indirectly, shall be secured in a non-diverting position using a carseal or a lock-and-key type configuration, or shall be equipped with a flow indicator.	ADEM Admin Code r. 335-3-11-.06(6)
7. In order to be classified as a Group 2 process vent, as calculated by the procedures in 40 CFR Part 63, Subpart G ("HON"), the TRE value of the applicable process vents shall be maintained at greater than 1.0 as specified in §63.113(a)(3).	ADEM Admin Code r. 335-3-11-.06(6)
8. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H shall be met for all applicable equipment in HAP service.	ADEM Admin. Code r. 335-3-11-.06(7)
9. The Carbon Disulfide (CS <sub>2</sub> ) Drum Loading facility shall utilize 95% submerged filling during the operation of the unit. The operation of the CS <sub>2</sub> Drum Loading facility is limited to loading 5,148,000 gallons of CS <sub>2</sub> during any consecutive twelve-month period.	ADEM Admin. Code r. 335-3-14-.04
10. The Carbon Disulfide (CS <sub>2</sub> ) Iso-Container Loading facility shall utilize 95% submerged filling during the operation of the unit. The operation of the CS <sub>2</sub> Iso-Container Loading facility is limited to loading 7,844,570 gallons of CS <sub>2</sub> during any consecutive twelve-month period.	ADEM Admin. Code r. 335-3-14-.04

## Carbon Disulfide Plant Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
11. Any source of particulate emissions shall not discharge into the atmosphere, particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, except for one six (6) minute period in any sixty (60) minute period of not greater than forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the hazardous air pollutant (HAP) emission rate shall be determined by EPA Reference Method 18 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
2. The test methods and procedures for determining transfer rack group determinations as listed in 40 CFR 63.128 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
3. The test methods and procedures for determining process vent group determinations as listed in 40 CFR 63.115 and 63.116 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
4. The test methods and procedures for determining wastewater applicability, group determinations, and compliance as specified in 40 CFR 63.144 and 63.145 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
5. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
6. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. As required by §63.127(b), the railcar loading condensers (CS-4A and CS-4B) shall be installed, calibrated, and maintained according to the manufacturer's specifications.	ADEM Admin. Code r. 335-3-11.06(6)

## Carbon Disulfide Plant Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring Continued</i>	
2. As required by §63.127(b)(2), to indicate compliance with the hazardous air pollutant (HAP) emission limitation, the facility shall continuously monitor the condenser exit (product side) temperature. The West Condenser (CS-4A) shall operate at a temperature less than -60°C and the East Condenser (CS-4B) shall operate at a temperature less than -175°F, or the temperatures established during the most recent stack test that demonstrated compliance with the HAP emission limitation.	ADEM Admin. Code r. 335-3-11.06(6)
3. The requirements of the leak detection and repair (LDAR) program of the HON as listed in §63.162 – §63.180 shall be followed for all applicable equipment in HAP service as the term is defined in §63.161, as applicable.	ADEM Admin. Code r. 335-3-11.06(7)
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall submit semiannual periodic reports in accordance with §63.118(f) and §63.152(c) of Subpart G of the HON.	ADEM Admin. Code r. 335-3-11.06(6)
2. All recordkeeping and reporting requirements listed in §63.152 of Subpart G of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
3. For the Group 1 transfer rack(s) the recordkeeping and reporting requirements list in §63.130 shall be followed, as applicable. The alternate recordkeeping requirements listed in §63.152(g) shall be followed. In order to maintain the alternate record keeping requirements, the Group 1 transfer rack(s) shall be capable of meeting the requirements of §63.152(g)(1)(i) – (1)(vi).	ADEM Admin. Code r. 335-3-11.06(6)
4. The reporting and recordkeeping requirements for the HON LDAR program shall be followed as specified in §63.181 and §63.182, as applicable.	ADEM Admin. Code r. 335-3-11.06(7)
5. The facility shall submit a semiannual period report in accordance with §63.182(d) of Subpart H of the HON.	ADEM Admin. Code r. 335-3-11.06(7)
6. For a HON Group 2 process vent stream with a TRE greater than 4.0, the reporting and recordkeeping requirements specified in §63.117(b) and §63.118(c) and (h) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11.06(6)
7. Records shall be maintained for the hours of operation and the amount of gallons loaded out for the Carbon Disulfide (CS <sub>2</sub> ) Drum Loading facility. These records shall be maintained and readily available for inspection for a period of five years.	ADEM Admin. Code r. 335-3-14-.04



## Carbon Disulfide Plant Provisos

### **Federally Enforceable Provisos**

### **Regulations**

#### *Recordkeeping and Reporting Requirements Continued*

8. Records shall be maintained for the hours of operation and the amount of gallons loaded out for the Carbon Disulfide (CS<sub>2</sub>) Iso-Container Loading facility. These records shall be maintained and readily available for inspection for a period of five years.

ADEM Admin. Code r.  
335-3-14-.04

## Additional Production Units

### Informational Summary

**Description:** Sulfur Chlorides Process Unit, Monochloroacetic Acid Process Unit, and Sodium Hydrosulfide Process Unit

**Installation Date:** Sulfur Chloride Process Unit – 1977  
Monochloroacetic Acid Process Unit – 1994  
Sodium Hydrosulfide Process Unit - 2001

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

N/A

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
MC-1	MCA Loading and Process Scrubber	HAP	N/A	N/A
SC-1	Sulfur Chlorides Process Scrubber	N/A	N/A	N/A
SC-2	Sulfur Chlorides Railcar Loading Scrubber	N/A	N/A	N/A
All Points	Additional Production Units	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	335-3-4-.01

## Additional Production Units Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
<i>Emission Standards</i>	
1. The Monochloroacetic Acid Process (MCA) shall be vented to the MCA Loading and Process Scrubber (MC-1) and shall be operated and maintained in such a way as to minimize emissions from the unit.	ADEM Admin. Code r. 335-3-14-.04
2. Any source of particulate emissions shall not discharge into the atmosphere, particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, except for one six (6) minute period in any sixty (60) minute period of not greater than forty percent (40%).	ADEM Admin Code r. 335-3-4-.01
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. No emission monitoring provisions are required for the Additional Production Units.	
<i>Recordkeeping and Reporting Requirements</i>	
1. Records shall be maintained of the production of MCA produced in each twelve month rolling period. These records should be kept in a permanent form suitable for inspection for at least five years.	ADEM Admin. Code r. 335-3-14-.04
2. Records shall be maintained of any time that the MCA Process is in operation and the process scrubber is not operating. The records shall consist of all times and duration, as well as the cause of the outage. The records shall be kept in a form suitable for inspection for a period of five years.	ADEM Admin. Code r. 335-3-14-.04

## Combustion Sources

### Informational Summary

**Description:** Process Heaters and Boilers

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

**40 CFR Part 60, Subpart Dc**

**40 CFR Part 63, Subpart DDDDD**

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
CS-3A	Selas Furnace A (35 MMBtu/hr )	PM	1.0 lb/hr	335-3-14-.04
CS-3B	Selas Furnace B (35 MMBtu/hr )	PM	1.0 lb/hr	335-3-14-.04
CX-1	H200 Process Heater (12 MMBtu/hr)	PM	$E = 1.38(H)^{-0.44}$	335-3-4-.03
CX-3	Crystex® Package Boiler (36.58 MMBtu/hr)	PM	$E = 1.38(H)^{-0.44}$	335-3-4-.03
CX-9	Crystex® Standby Methane Boiler (32.8 MMBtu/hr)	PM	1.0 lb/hr	335-3-14-.04
CS-3A, CS-3B, and CX-9	See Above	SO <sub>2</sub>	2.7 lb/hr	335-3-14-.04
CX-1 and CX-3	See Above	SO <sub>2</sub>	1.8 lb/MMBtu	335-3-5-.01
All Points	Combustion Sources	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	335-3-4-.01

## Combustion Sources Provisos

Federally Enforceable Provisos	Regulations
<p><i>Applicability</i></p> <ol style="list-style-type: none"> <li>1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.</li> <li>2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.</li> <li>3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions – Fuel Burning Equipment.</li> <li>4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.</li> <li>5. The 36.58 MMBtu/hr Crystex® Package Boiler (CX-3) and the 32.8 MMBtu/hr Crystex® Standby Methane Boiler (CX-9) are subject to 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.</li> <li>6. All combustion sources (CS-3A, CS-3B, CX-1, CX-3, and CX-9) are subject to 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.</li> <li>7. The 36.58 MMBtu/hr Crystex® Package Boiler (CX-3) and the 32.8 MMBtu/hr Crystex® Standby Methane Boiler (CX-9) are subject to requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Dc.</li> <li>8. All combustion sources (CS-3A, CS-3B, CX-1, CX-3, and CX-9) are subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.</li> <li>9. This source is subject to synthetic minor PSD emission limitations.</li> </ol>	<p>ADEM Admin. Code r. 335-3-16-.03</p> <p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-4-.03</p> <p>ADEM Admin. Code r. 335-3-5-.01(1)(a)</p> <p>ADEM Admin. Code r. 335-3-10-.02(2)(c)</p> <p>ADEM Admin. Code r. 335-3-11-.06(107)</p> <p>ADEM Admin. Code r. 335-3-10-.02(1)</p> <p>ADEM Admin. Code r. 335-3-11-.06(1)</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>

## Combustion Sources Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
1. In order to avoid Prevention of Significant Deterioration (PSD), the particulate matter (PM) emission rates from the 35 MMBtu/hr Selas Furnace A (CS-3A), the 35 MMBtu/hr Selas Furnace B (CS-3B), and the 32.8 MMBtu/hr Crystex® Standby Methane Boiler (CX-9) shall not exceed 1.0 lb/hr each.	ADEM Admin Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from the 12 MMBtu/hr H200 Process Heater (CX-1) and the 36.58 MMBtu/hr Crystex® Package Boiler (CX-3) shall not exceed the amount determined by the equation: $E = 1.38 H^{-0.44}$ Where: E = Emissions in lb/million BTU H = Heat Input in millions of BTU/hr	ADEM Admin. Code r. 335-3-4-.03
3. In order to avoid Prevention of Significant Deterioration (PSD), the sulfur dioxide (SO <sub>2</sub> ) emission rates from the 35 MMBtu/hr Selas Furnace A (CS-3A), the 35 MMBtu/hr Selas Furnace B (CS-3B), and 32.8 MMBtu/hr Crystex® Standby Methane Boiler (CX-9) shall not exceed 2.7 lb/hr each.	ADEM Admin. Code r. 335-3-14-.04
4. The sulfur dioxide (SO <sub>2</sub> ) emission rate from the 12 MMBtu/hr H200 Process Heater (CX-1) and the 36.58 MMBtu/hr Crystex® Package Boiler (CX-3) shall not exceed 1.8 lb/MMBtu each.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
5. All combustion sources (CS-3A, CS-3B, CX-1, CX-3, and CX-9) shall be classified as a Gas 1 Unit as defined in 40 CFR Part 63, Subpart DDDDD. In order to maintain this classification these sources shall be limited to firing natural gas only.	ADEM Admin. Code r. 335-3-11-.06(107)
6. Any source of particulate emissions shall not discharge into the atmosphere, particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, except for one six (6) minute period in any sixty (60) minute period of not greater than forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the particulate matter (PM) emission rate shall be determined by EPA Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03

## Combustion Sources Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures Continued</i>	
2. Compliance with the sulfur dioxide (SO <sub>2</sub> ) emission rate shall be determined by EPA Reference Method 6 or 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
3. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. In order to indicate compliance with the particulate matter (PM) emission rates and the opacity standard, the facility shall inspect all combustion sources (CS-3A, CS-3B, CX-1, CX-3, and CX-9) for visible emissions at least once per calendar week, while the unit is operating. If any visible emissions are noted, the facility shall initiate corrective action within 24 hours.	ADEM Admin. Code r. 335-3-14-.04
<i>Recordkeeping and Reporting Requirements</i>	
1. As indicated in §60.48c(g)(2), the total amount of natural gas combusted in the 36.58 MMBtu/hr Crystex® Package Boiler (CX-3) and the 32.8 MMBtu/hr Crystex® Standby Methane Boiler (CX-9) shall be recorded on a monthly basis.	ADEM Admin. Code r. 335-3-10-.02-(2)(c)
2. The recordkeeping requirements of §63.7555 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
3. The reporting requirements of Table 9 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable, as stated in §63.7550.	ADEM Admin. Code r. 335-3-11-.06(107)
4. Records of the date, time, and results of the weekly visual emission inspections for all of the combustion sources (CS-3A, CS-3B, CX-1, CX-3, and CX-9) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

## HON Group 1 Storage Vessels

### Informational Summary

**Description:** Storage Vessels Classified as Group 1 with Respect to 40 CFR Part 63, Subpart G

**Operating Schedule:** 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

**40 CFR Part 60, Subpart Kb**

**40 CFR Part 63, Subpart F, G, and H**

Pollutants Emitted

Tank No.	Tank Capacity (gallons)	Material Stored	Installation Date	Control Technique	Standard
8T095	1,340,094	CS <sub>2</sub>	1996	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T096	1,458,660	CS <sub>2</sub>	1998	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T510	94,000	CS <sub>2</sub>	1997	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T511	94,000	CS <sub>2</sub>	1997	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T520	94,000	CS <sub>2</sub>	1997	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T522	94,000	CS <sub>2</sub>	1997	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)
8T530	94,000	CS <sub>2</sub>	1997	Fixed Roof and Internal Floating Roof	335-3-11-.06(6)



## HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5), (6), and (7)
3. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions unless otherwise noted in Subparts F, G, or H.	ADEM Admin. Code r. 335-3-11-.06(1)
4. This source is subject to the requirements of 40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Compliance with 40 CFR Part 63, Subpart F, G, and H shall constitute compliance with this requirement.	ADEM Admin. Code r. 335-3-10-.02(9)(b)
<i>Emission Standards</i>	
1. In accordance with §63.119(a)(1), the hazardous air pollutant (HAP) emissions from the following storage vessels shall be reduced by operating and maintaining a fixed roof and an internal floating roof on the vessel in accordance with the requirements of §63.119(b)(1) through (b)(6):	ADEM Admin Code r. 335-3-11.06(6)
8T095	8T520
8T096	8T522
8T510	8T530
8T511	
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the hazardous organic pollutant (HAP) emission rate from the storage vessels equipped with a fixed roof and internal floating roof shall be determined by the procedures of §63.120(a)(1) through (a)(7).	ADEM Admin. Code r. 335-3-11-.06(6)
<i>Emission Monitoring</i>	
1. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart H	ADEM Admin. Code r. 335-3-11.06(7)

## HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
<p><i>Recordkeeping and Reporting Requirements</i></p> <ol style="list-style-type: none"> <li>1. Records of the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel shall be maintained and readily available for inspection for the life of the vessel while in “HON” service.</li> <li>2. Records of the inspections of the fixed roof and internal floating roof required by §63.120(a) shall be maintained and readily available for inspection for a period of five years.</li> <li>3. A periodic report addressing the criteria listed in §63.152(c) with the additional information specified in §63.122(a), (d), and (h) shall be submitted semiannually (every 6 calendar months) no later than 60 calendar days after the end of each 6-month period as stated in §63.152(a)(4) in 40 CFR Part 63, Subpart G.</li> <li>4. As indicated in §63.152(d)(2), the notifications of inspections required by §63.122(h)(1) and (h)(2) shall be submitted, as applicable.</li> <li>5. The reporting and recordkeeping requirements for storage vessels listed in §63.122 and §63.123, respectively of 40 CFR Part 63, Subpart G shall be followed, as applicable.</li> </ol>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p>

## Emergency Engines

### Informational Summary

**Description:** Emergency Engines

**Installation Date:** CS<sub>2</sub> Emergency Generator – 1994  
 CTX Emergency Generator – 2005  
 East Firewater Pump – 1994  
 Middle Firewater Pump – 1994  
 West Firewater Pump – 1994

**Operating Capacity:** CS<sub>2</sub> Emergency Generator – 600 HP  
 CTX Emergency Generator – 465 HP  
 East Firewater Pump – 482 HP  
 Middle Firewater Pump – 482 HP  
 West Firewater Pump – 482 HP

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

**40 CFR Part 63, Subpart ZZZZ**

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
8EG631	Carbon Disulfide (CS <sub>2</sub> ) Emergency Generator	N/A	No Specific Requirements	335-3-11-.06(103)
6EG412	CTX Emergency Generator	HAPs	No Specific Requirements	335-3-11-.06(103)
1P101E	East Firewater Pump	HAPs	No Specific Requirements	335-3-11-.06(103)
1P101M	Middle Firewater Pump	HAPs	No Specific Requirements	335-3-11-.06(103)
1P101W	West Firewater Pump	HAPs	No Specific Requirements	335-3-11-.06(103)
All Points	Emergency Engines	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	335-3-4-.01

## Emergency Engines Provisos

Federally Enforceable Provisos	Regulations
<p><i>Applicability</i></p> <ol style="list-style-type: none"> <li>1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.</li> <li>2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.</li> <li>3. All of the emergency engines (8EG631, 6EG412, 1P101E, 1P101M, and 1P101W) are subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutant for Stationary Reciprocating Internal Combustion Engines.</li> <li>4. All of the emergency engines (8EG631, 6EG412, 1P101E, 1P101M, and 1P101W) are subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart ZZZZ.</li> </ol>	<p>ADEM Admin. Code r. 335-3-16-.03</p> <p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-11-.06(103)</p> <p>ADEM Admin. Code r. 335-3-11-.06(1)</p>
<p><i>Emission Standards</i></p> <ol style="list-style-type: none"> <li>1. In accordance with §63.6640(f), the emergency engines (8EG631, 6EG412, 1P101E, 1P101M, and 1P101W) shall only operate as specified below:               <ol style="list-style-type: none"> <li>(a) Emergency situations.</li> <li>(b) Maintenance checks and readiness testing not to exceed 100 hours per year.</li> <li>(c) Non-emergency situations, not to secede 50 hours per year (these 50 hours count toward the 100 hours per year allowed for maintenance check and readiness testing). The 50 hours per year for non-emergency situation cannot be used for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply power to as part of a financial arrangement with another entity.</li> </ol> </li> </ol>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p>

## Emergency Engines Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
<p>2. In accordance with §63.6602, the emergency engines (6EG412, 1P101E, 1P101M, and 1P101W) shall meet the requirements in Table 2c of 40 CFR Part 63, Subpart ZZZZ as specified below:</p> <p>(a) Change oil and filter every 500 hours of operation or annually, whichever comes first.</p> <p>(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.</p> <p>(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p>
<p>3. Any source of particulate emissions shall not discharge into the atmosphere, particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, except for one six (6) minute period in any sixty (60) minute period of not greater than forty percent (40%).</p>	<p>ADEM Admin. Code r. 335-3-4-.01</p>
<i>Compliance and Performance Test Methods and Procedures</i>	
<p>1. The facility must operate and maintain the emergency engines (8EG631, 6EG412, 1P101E, 1P101M, and 1P101W) according to the manufacturer's written instruction or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p>
<p>2. Compliance with the opacity standard shall be determined by EPA Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	<p>ADEM Admin. Code r. 335-3-10-.03</p>
<i>Emission Monitoring</i>	
<p>1. In accordance with §63.6625(f), the emergency engines (6EG412, 1P101E, 1P101M, and 1P101W) must have a non-resettable hour meter installed prior to startup of the engine.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p>

## Emergency Engines Provisos

### **Federally Enforceable Provisos**

### **Regulations**

#### *Recordkeeping and Reporting Requirements*

1. The facility shall keep records of the operation of the engines in emergency and non-emergency service, which is recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time. These records shall be maintained and readily available for inspection for a period of five years.

ADEM Admin. Code r.  
335-3-14-.04

## **APPENDIX A (CAM)**

### **Compliance Assurance Monitoring Requirements**

## CAM Plan for Sulfuric Acid Plant Hydrogen Peroxide Scrubber (AC-1)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	SO <sub>2</sub>	SO <sub>3</sub>	Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> ) Mist
Measurement Approach	CEMS	Annual Stack Test	Annual Stack Test
II. Indicator Range	An excursion is defined as a SO <sub>2</sub> level > 2.5 lbs/ton of acid produced for more than 15 minutes. If the SO <sub>2</sub> level reaches the 500 ppm limit an alarm will sound and corrective action shall be taken in order to return the system to normal operating conditions.	An excursion is defined as a SO <sub>3</sub> level > 0.20 lbs/ton of acid produced. If the test result indicates a SO <sub>3</sub> level above the specified permit limit, corrective action shall be taken in order to return the system to normal operating conditions.	An excursion is defined as a H <sub>2</sub> SO <sub>4</sub> level > 0.15 lbs/ton of acid produced. If the test result indicates a H <sub>2</sub> SO <sub>4</sub> level above the specified permit limit, corrective action shall be taken in order to return the system to normal operating conditions.
III. Performance Criteria			
A. Representative Data	See Specification 2 (SO <sub>2</sub> ); See Specification 3 (O <sub>2</sub> ) The CEMS collects data on a continuous basis. The O <sub>2</sub> analyzer tolerance is +/- 0.5%. The SO <sub>2</sub> analyzer tolerance is 2.5% of calibrated span, ranging from 0-500 ppm.	EPA Reference Method 8	EPA Reference Method 8
B. Verification of Operational Status	The SO <sub>2</sub> emission rate (ppm) is monitored continuously and the SO <sub>2</sub> emission rate (lbs/ton) is calculated once per 12-hour shift.	Annual Stack Test	Annual Stack Test
C. QA/QC Practices and Criteria	The SO <sub>2</sub> and the O <sub>2</sub> analyzers are calibrated daily.	Annual Stack Test	Annual Stack Test
D. Monitoring Frequency	The CEMS monitors the SO <sub>2</sub> emission rate on a continuous basis.	Annual Stack Test	Annual Stack Test
Data Collection Procedures	The CEMS records the data continuously.	Annual Stack Test	Annual Stack Test
Averaging Period	Continuous	3-hours	3-hours



## **APPENDIX B**

### **Sulfuric Acid Plant with Hydrogen Peroxide Scrubber Continuous Emission Monitoring System (CEMS) Plan**