Alabama Department of Environmental Management

MAJOR SOURCE OPERATING PERMIT

PERMITTEE: UOP-LLC

FACILITY NAME: MOBILE PLANT

FACILITY/PERMIT NO.: 503-8010

LOCATION: CHICKASAW, MOBILE COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, 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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1. Transfer	
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.	Rule 335-3-16-.02(6)
2. Renewals	
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. 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.	Rule 335-3-16-.12(2)
3. Severability Clause	
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.	Rule 335-3-16-.05(e)
4. Compliance	
(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.	Rule 335-3-16-.05(f)
(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.	Rule 335-3-16-.05(g)

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5. Termination for Cause	
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.	Rule 335-3-16-.05(h)
6. Property Rights	
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.	Rule 335-3-16-.05(i)
7. Submission of Information	
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.	Rule 335-3-16-.05(j)
8. Economic Incentives, Marketable Permits, and Emissions Trading	
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.	Rule 335-3-16-.05(k)
9. Certification of Truth, Accuracy, and Completeness:	
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.	Rule 335-3-16-.07(a)
10. Inspection and Entry	
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:	Rule 335-3-16-.07(b)

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(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;	
(b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;	
(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;	
(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.	
11. <u>Compliance Provisions</u>	
(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.	Rule 335-3-16-.07(c)
(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.	
12. <u>Compliance Certification</u>	
A compliance certification shall be submitted annually by October 14th of each year, unless more frequent periods are specified according to the specific rule governing the source or required by the Department.	Rule 335-3-16-.07(e)
(a) The compliance certification shall include the following:	
(1) The identification of each term or condition of this permit that is the basis of the certification;	
(2) The compliance status;	
(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);	
(4) Whether compliance has been continuous or intermittent;	
(5) Such other facts as the Department may require to determine the compliance status of the source;	

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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. <u>Reopening for Cause</u>	
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. <u>Additional Rules and Regulations</u>	
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), <u>Code of Alabama 1975</u>, as amended

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15. Equipment Maintenance or Breakdown	
(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:	Rule 335-3-1-.07(1),(2)
(1) Identification of the specific facility to be taken out of service as well as its location and permit number;	
(2) The expected length of time that the air pollution control equipment will be out of service;	
(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;	
(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;	
(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.	
(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.	
16. Operation of Capture and Control Devices	
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.	§22-28-16(d), Code of Alabama 1975, as amended

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17. Obnoxious Odors	
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.	Rule 335-3-1-.08
18. Fugitive Dust	
(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.	Rule 335-3-4-.02
(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:	
(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	
(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; or	
(3) By paving; or	
(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	
(5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.	
19. Additions and Revisions	
Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.	Rule 335-3-16-.13 and .14
20. Recordkeeping Requirements	
(a) Records of required monitoring information of the source shall include the following:	335-3-16-.05(c)2.
(1) The date, place, and time of all sampling or measurements;	
(2) The date analyses were performed;	
(3) The company or entity that performed the analyses;	
(4) The analytical techniques or methods used;	

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(5) The results of all analyses; and (6) The operating conditions that existed at the time of sampling or measurement. (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.	
21. <u>Reporting Requirements</u> (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).	Rule 335-3-16-.05(c)(3)
(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.	
22. <u>Emission Testing Requirements</u> 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.	Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)
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. To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter: (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.	Rule 335-3-1-.04

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(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).	
(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.	
(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances	
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.	Rule 335-3-1-.04
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.	
23. <u>Payment of Emission Fees</u>	
Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code r. 335-1-7-.04.	Rule 335-1-7-.04
24. <u>Other Reporting and Testing Requirements</u>	
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.	Rule 335-3-1-.04(1)
25. <u>Title VI Requirements (Refrigerants)</u>	
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.	335-3-16-.05(a)
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.	

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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.	
26. Chemical Accidental Prevention Provisions	
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:	40 CFR Part 68
(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.	
(b) The owner or operator shall submit one of the following:	
(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,	
(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.	
27. Display of Permit	
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.	Rule 335-3-14-.01(1)(d)
28. Circumvention	
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.	Rule 335-3-1-.10
29. Visible Emissions	
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.	Rule 335-3-4-.01(1)

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30. Fuel-Burning Equipment	
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).	Rule 335-3-4-.03(1)
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.	Rule 335-3-5-.01
31. Process Industries – General	
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.	Rule 335-3-4-.04
32. Averaging Time for Emission Limits	
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.	Rule 335-3-1-.05
33. Permit Shield	
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.	Rule 335-3-16-.10
34. Compliance Assurance Monitoring (CAM)	
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.	
(a) Operation of Approved Monitoring	40 CFR 64.7
(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).	

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(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.	
(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.	
(4) Response to excursions or exceedances. (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.	

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(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.	
(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.	
(b) Quality Improvement Plan (QIP) Requirements	40 CFR 64.8
(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.	
(2) Elements of a QIP:	
(A) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.	

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(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: (i) Improved preventive maintenance practices. (ii) Process operation changes. (iii) Appropriate improvements to control methods. (iv) Other steps appropriate to correct control performance. (v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above). (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. (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: (A) Failed to address the cause of the control device performance problems; or (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. (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.	

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(c) Reporting and Recordkeeping Requirements	40 CFR 64.9
(1) General reporting requirements	
(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.	
(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:	
(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;	
(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	
(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.	
(2) General recordkeeping requirements.	
(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).	

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(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	40 CFR 64.10
(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.	

Steam Generation Boilers

Informational Summary

Description: Three Process Heat Boilers (Natural Gas Fired)

Permit Unit No.: 001

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

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Regulation
EP-001	Boiler 8100 (68 MMBtu/hr)	PM	$E = 1.38H^{-0.44}$	Rule 335-3-4-.03(1)
EP-062	Boiler 7900 (59 MMBtu/hr)			
EP-107	Boiler 8020 (33.5 MMBtu/hr)	PM	3.4 lb/hr	Rule 335-3-14-.04
EP-001 and EP-062	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
EP-107	See Above	SO_2	9.0 lb/hr	Rule 335-3-14-.04
All Points	Steam Generation Boilers (Permit Unit No. 001)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Steam Generation Boilers Provisos

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Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
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.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
5. Boiler 8020 (EP-107) is subject to 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	ADEM Admin. Code r. 335-3-10-.02(2)(c)
6. Boiler 8020 (EP-107) 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 Dc.	ADEM Admin. Code r. 335-3-10-.02(1)
7. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Boiler 8100 (EP-001) and Boiler 7900 (EP-062) shall not exceed the amount determined by the equation per emission point: $E = 1.38H^{-0.44}$ Where: E = Emissions in lb/million BTU H = Heat Input in millions of BTU/hr	ADEM Admin. Code r. 335-3-4-.03(1)
2. The particulate matter (PM) emission rate from Boiler 8020 (EP-107) shall not exceed 3.4 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
3. The sulfur dioxide (SO_2) emission rate from Boiler 8100 (EP-001) and Boiler 7900 (EP-062) shall not exceed 1.8 lb/MMBtu per emission point.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
4. The sulfur dioxide (SO_2) emission rate from Boiler 8100 (EP-107) shall not exceed 9.0 lb/hr.	ADEM Admin. Code r. 335-3-14-.04

Steam Generation Boilers Provisos

Federally Enforceable Provisos	Regulations
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, expect 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
6. Boiler 8100 (EP-001), Boiler 7900 (EP-062), and Boiler 8020 (EP-107) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the steam generation boilers (EP-001, EP-062, and EP-107) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. As required by §60.48c(g)(2), the total amount of natural gas combusted in Boiler 8020 (EP-107) shall be recorded on a monthly basis.	ADEM Admin. Code r. 335-3-10-.02(2)(c)

Steam Generation Boilers Provisos

Federally Enforceable Provisos	Regulations
2. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the steam generation boilers (EP-001, EP-062, and EP-107) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

General Material Handling

Informational Summary

Description: General Material Handling for Various Process Lines

Permit Unit No.: 002

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	Regulation
EP-004	Baghouse on Bulk Storage Silo (1361)	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-005	Baghouse on Bulk Storage Silo (1302)			
EP-006	Baghouse on Hopper Car Unloading Silo			
EP-007	Baghouse on Storage Silo (1417)			
EP-014	Direct-Fired Equipment with Baghouse Series			
EP-070	Baghouse on Hopper Car Unloading			
EP-138	Baghouse on Bulk Bag Unloading System	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-141	Crystallizer Dust Collection System	PM	0.10 lb/hr	Rule 335-3-14-.04
EP-141	See Above	PM_{10}	0.084 lb/hr	Rule 335-3-14-.04
EP-141	See Above	$PM_{2.5}$	0.05 lb/hr	Rule 335-3-14-.04
EP-014	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	General Material Handling (Permit Unit No. 002)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

General Material Handling Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
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.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
5. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from General Material Handling (Process Unit No. 002) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = Emissions in lb/hr P = Process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from EP-138 shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
3. The bulk bag unloading system associated with EP-138 shall not operate without venting to the respective baghouse for control.	ADEM Admin. Code r. 335-3-14-.04
4. The particulate matter (PM, PM_{10}, $PM_{2.5}$) emission rate from EP-141 shall not exceed 0.10 lb/hr, 0.084 lb/hr, and 0.05 lb/hr, respectively.	ADEM Admin. Code r. 335-3-14-.04
5. The process equipment associated with Crystallizer Dust Collection System (EP-141) shall not operate without venting to the respective filter media for control.	ADEM Admin. Code r. 335-3-14-.04
6. The sulfur dioxide (SO_2) emission rate from the Direct-Fired Equipment with Baghouse Series (EP-014) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
7. The direct-fired equipment associated with EP-014 shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04

General Material Handling Provisos

Federally Enforceable Provisos	Regulations
8. 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, expect 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
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the PM_{10} and $PM_{2.5}$ emission rates shall be determined by EPA Reference Method 201/201A in Appendix M of 40 CFR 51. 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 sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
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.	ADEM Admin. Code r. 335-3-10-.03
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rates and the opacity standard, the emission points associated with the General Material Handling Unit (EP-004, EP-005, EP-006, EP-007, EP-014, EP-070, EP-138, and EP-141) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04

General Material Handling Provisos

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the General Material Handling Unit (EP-004, EP-005, EP-006, EP-007, EP-014, EP-070, EP-138, and EP-141) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Pneumatic Clay Transfer System

Informational Summary

Description: Raw Material Transfer

Permit Unit No.: 003

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	Regulation
EP-018	Clay Transfer Baghouse (4005)	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-019	Clay Transfer Baghouse (4060)			
EP-021	Clay Transfer Baghouse (4166)			
EP-072	Clay Transfer Baghouse (4496)			
All Points	Pneumatic Clay Transfer System (Permit Unit No. 003)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Pneumatic Clay Transfer System Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
3. 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
Emission Standards	
1. The particulate matter (PM) emission rate from Pneumatic Clay Transfer System (Permit Unit No. 003) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = Emissions in lb/hr P = Process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
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, expect 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
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. 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

Pneumatic Clay Transfer System Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with the Pneumatic Clay Transfer System (EP-018, EP-019, EP-021, and EP-072) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Pneumatic Clay Transfer System (EP-018, EP-019, EP-021, and EP-072) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Project 505

Informational Summary

Description: New Generation Material (Adsorbents and Catalysts) Production

Permit Unit No.: 004

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	Regulation
EP-069	Classifier Baghouse System	PM	1.25 lb/hr	Rule 335-3-14-.04
EP-069	See Above	PM_{10}	1.05 lb/hr	Rule 335-3-14-.04
EP-069	See Above	$PM_{2.5}$	0.63 lb/hr	Rule 335-3-14-.04
EP-081	P505 Heater (5 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-087	Baghouse on Direct-Fired Dryer	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-088A	Wet Pre-Scrubber and Wet Scrubber	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-088A	See Above	VOC	N/A	N/A
EP-088B	Packed Tower for Emergency Control	VOC	N/A	N/A
EP-136	Spray Dryer Baghouse System	PM	0.44 lb/hr	Rule 335-3-14-.04
EP-136	See Above	PM_{10}	0.37 lb/hr	Rule 335-3-14-.04
EP-136	See Above	$PM_{2.5}$	0.24 lb/hr	Rule 335-3-14-.04
EP-137	Cooling Loop Baghouse System	PM	0.12 lb/hr	Rule 335-3-14-.04
EP-137	See Above	PM_{10}	0.10 lb/hr	Rule 335-3-14-.04
EP-137	See Above	$PM_{2.5}$	0.06 lb/hr	Rule 335-3-14-.04
EP-140	Filter Media for Solids Addition System	PM	0.51 lb/hr	Rule 335-3-14-.04
EP-140	See Above	PM_{10}	0.43 lb/hr	Rule 335-3-14-.04
EP-140	See Above	$PM_{2.5}$	0.26 lb/hr	Rule 335-3-14-.04
EP-081, EP-087, and EP-136	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Project 505 (Permit Unit No. 004)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Project 505 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM, PM_{10}, $PM_{2.5}$) emission rates from EP-069 shall not exceed 1.25 lb/hr, 1.05 lb/hr, and 0.63 lb/hr, respectively.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from P505 Heater (EP-081) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The particulate matter (PM, PM_{10}, $PM_{2.5}$) emission rates from Spray Dryer Baghouse System (EP-136) shall not exceed 0.44 lb/hr, 0.37 lb/hr, and 0.24 lb/hr, respectively.	ADEM Admin. Code r. 335-3-14-.04
4. The particulate matter (PM, PM_{10}, $PM_{2.5}$) emission rates from Cooling Loop Baghouse System (EP-137) shall not exceed 0.12 lb/hr, 0.10 lb/hr, and 0.06 lb/hr, respectively.	ADEM Admin. Code r. 335-3-14-.04
5. The particulate matter (PM, PM_{10}, $PM_{2.5}$) emission rates from Filter Media for Solids Addition System (EP-140) shall not exceed 0.51 lb/hr, 0.43 lb/hr, and 0.26 lb/hr, respectively.	ADEM Admin. Code r. 335-3-14-.04
6. The particulate matter (PM) emission rate from Project 505 (Permit Unit No. 004) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr, P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)

Project 505 Provisos

Federally Enforceable Provisos	Regulations
7. The sulfur dioxide (SO_2) emission rates from P505 Heater (EP-081), the direct-fired dryer associated with EP-087, and the spray dryer associated with EP-136 shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
8. 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, expect 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
9. The P505 Heater (EP-081), the direct-fired dryer associated with EP-087, and the spray dryer associated with EP-136 shall be fueled by natural gas only.	ADEM Admin. Code r. 335-3-14-.04
10. The total amount of molecular sieve material transferred to Project 505 (Permit Unit No. 004) shall not exceed 2,400,000 lbs., based on a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
11. The process equipment associated with emission point (EP-069, EP-136, EP-137, and EP-140) shall not operate without venting to its respective baghouse for control.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the particulate matter (PM_{10} and $PM_{2.5}$) emission rates shall be determined by EPA Reference Method 201/201A in Appendix M of 40 CFR 51. 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 sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
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.	ADEM Admin. Code r. 335-3-10-.03

Project 505 Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Project 505 (EP-069, EP-081, EP-087, EP-088A, EP-136, EP-137, and EP-140) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. The amount of molecular sieve material transferred to Project 505 shall be calculated once per calendar month and utilized to calculate a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
2. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Project 505 (EP-069, EP-081, EP-087, EP-088A, EP-136, EP-137, and EP-140) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
3. Records of the amount of molecular sieve material transferred to Project 505 shall be maintained in a permanent form suitable for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

MPI Process

Informational Summary

Description: Raw Material Processing

Permit Unit No.: 005

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	Regulation
EP-121	Baghouse (23220) on Direct-Fired Dryer	PM	3.4 lb/hr	Rule 335-3-14-.04
EP-121	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	MPI Process (Permit Unit No. 005)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

MPI Process Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
4. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Baghouse (23220) on Direct-Fired Dryer (EP-121) shall not exceed 3.4 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
2. The sulfur dioxide (SO_2) emission rate from the direct-fired dryer associated with EP-121 shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
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, expect 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
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates of these units shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. Compliance with the opacity standard for these units 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

MPI Process Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with the MPI Process (EP-121) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the MPI Process (EP-121) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Catalyst Plant 6A

Informational Summary

Description: Produces Pellets and Activated Powder to be used as Catalyst

Permit Unit No.: 006

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	Regulation
EP-077	Pneumatic Conveying Dust Collector	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-130	Packaging System Bag Collector			
EP-078	Line 6A Kiln (4.2 MMBtu)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-079	11960 Bag Collector	PM	0.46 lb/hr	Rule 335-3-14-.04
EP-078	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
EP-079	See Above	NO_x	N/A	N/A
All Points	Catalyst Plant 6A (Permit Unit No. 006)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Catalyst Plant 6A Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Catalyst Plant 6A (Process Unit No. 006) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 35-3-4-.04(1)
2. The particulate matter (PM) emission rate from Line 6A Kiln (EP-078) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The particulate matter (PM) emission rate from 11960 Bag Collector (EP-079) shall not exceed 0.46 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
4. The sulfur dioxide (SO_2) emission rate from Line 6A Kiln (EP-078) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
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, expect 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

Catalyst Plant 6A Provisos

Federally Enforceable Provisos	Regulations
6. The Line 6A Kiln (EP- 078) shall be fueled by natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Catalyst Plant 6A (EP-077, EP-078, EP-079, and EP-130) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Catalyst Plant 6A (EP-077, EP-078, EP-079, and EP-130) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

High Temperature Belt Dryer

Informational Summary

Description: High Temperature Belt Dryer (Natural Gas Fired)

Permit Unit No.: 007

Installation Date: 1986

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 VVVVVV

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Regulation
EP-089	High Temperature Belt Dryer – Process Emissions	Total Metal HAP	Collective Control ≥ 95%	Rule 335-3-11-.06(151)
EP-090, EP-091, EP-092, and EP-093	High Temperature Belt Dryer (Zone 1-4 Exhaust)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-090, EP-091, EP-092, and EP-093	High Temperature Belt Dryer (Zone 1-4 Exhaust)	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
EP-105	$DeNO_x$ Unit	NO_x	N/A	N/A
EP-153	High Temperature Belt Dryer – Zone 1 Scrubber	Total Metal HAP	Collective Control ≥ 95%	Rule 335-3-11-.06(151)
EP-089, EP-105, and EP-153	See Above	PM	$E=3.59P^{0.62}$	Rule 335-3-4-.04(1)
All Points	High Temperature Belt Dryer (Permit Unit No. 007)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

High Temperature Belt Dryer Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
7. This source is subject to 40 CFR Part 63, Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.	ADEM Admin. Code r. 335-3-11-.06(151)
8. 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 63, Subpart VVVVVV.	ADEM Admin Code r. 335-3-11-.06(1)
Emission Standards	
1. In order to comply with Table 4 of 40 CFR Subpart VVVVVV, this facility shall reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3), (4), or (5).	ADEM Admin. Code r. 335-3-11-.06(151)
2. The particulate matter (PM) emission rate from the emission points (EP-090, EP-091, EP-092, and EP-093) shall not exceed 0.5 lb/MMBtu, each.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rate from emission points (EP-090, EP-091, EP-092, and EP-093) shall not exceed 1.8 lb/MMBtu, each.	ADEM Admin. Code r. 335-3-5-.01

High Temperature Belt Dryer Provisos

Federally Enforceable Provisos	Regulations
4. The particulate matter (PM) emission rate for process emissions from High Temperature Belt Dryer (Process Unit No. 007) shall not exceed the amount determined by the following equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
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, expect 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
6. The process emissions from the high temperature belt dryer shall be routed through one of the following emission points: EP-089, EP-105, or EP-153.	ADEM Admin. Code r. 335-3-14-.04
7. The High Temperature Belt Dryer (EP-090, EP-091, EP-092, and EP-093) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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

High Temperature Belt Dryer Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with the High Temperature Belt Dryer (EP-089, EP-090, EP-091, EP-092, EP-093, and EP-153) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. Pursuant to 40 CFR 63.11495(a)(3), the facility must conduct inspections of process vessels and equipment for each chemical manufacturing process unit (CMPU) in metal HAP service to determine that the process vessels are sound and free of leaks. The facility must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair, as required by 40 CFR 63.11495(a)(4).	ADEM Admin. Code r. 335-3-11-.06(151)
3. Pursuant to 40 CFR 11495(d), the facility must, at all times, operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	ADEM Admin. Code r. 335-3-11-.06(151)
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the High Temperature Belt Dryer (EP-089, EP-090, EP-091, EP-092, EP-093, and EP-153) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. In accordance with 40 CFR 63.11495(a)(5), the facility shall keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.	ADEM Admin. Code r. 335-3-11-.06(151)
3. In accordance with 40 CFR 63.11501(c)(1)(vii), the facility must maintain records of the date, time, and duration of each malfunction of operation or process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.	ADEM Admin. Code r. 335-3-11-.06(151)

High Temperature Belt Dryer Provisos

Federally Enforceable Provisos	Regulations
4. In accordance with 40 CFR 63.11501(c)(1)(viii), the facility must maintain records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	ADEM Admin. Code r. 335-3-11-.06(151)
5. The facility shall submit semiannual compliance reports in accordance with the requirements stated in 40 CFR 63.11501(d)(1) through (8), as applicable.	ADEM Admin. Code r. 335-3-11-.06(151)

Molecular Sieve Production Line 1

Informational Summary

Description: Produces Absorbents for Various Manufacturing and Operational Applications

Permit Unit No.: 008

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	Regulation
EP-027	Pneumatic Transfer System Baghouse	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-073	Baghouse on 2 Mixers, Forming, and Predryer (No. 1 Line)			
EP-074	Baghouse on Direct-Fired Dryer and No. 1 Rotary Kiln			
EP-030	No. 1 Rotary Kiln (5.5 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-030 and EP-074	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 1 (Process Unit No. 008)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 1 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 1 (Process Unit No. 008) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr, P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from No. 1 Rotary Kiln (EP-030) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rate from No. 1 Rotary Kiln (EP-030) and the direct-fired dryer associated with EP-074 shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
4. The No. 1 Rotary Kiln (EP-030) and the direct-fired dryer associated with EP-074 shall be fueled by natural gas only.	ADEM Admin. Code r. 335-3-14-.04
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, expect 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

Molecular Sieve Production Line 1 Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates for these units shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 1 (EP-027, EP-030, EP-073, and EP-074) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 1 (EP-027, EP-030, EP-073, and EP-074) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 6

Informational Summary

Description: Produces Pellets and Activated Powder to be used as Catalyst

Permit Unit No.: 012

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 VVVVVV

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Regulation
EP-015	Dumping Chute Hoods Baghouse	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-016	Baghouse on No. 6 Line Dryer			
EP-024	Pneumatic Transfer System Baghouse			
EP-028	Pneumatic Transfer System Wet Scrubber			
EP-131	Baghouse on Lite Phase Convey System			
EP-132	Baghouse on Recycling System			
EP-133	Wet Scrubber on No. 6 Rotary Kiln			
EP-134	Filter System on No. 6 Rotary Kiln			
EP-135	Baghouse on Packaging System			
EP-151	Solids Additions No. 1			
EP-152	Solids Additions No. 2			
EP-154	Baghouse on P&S Dryer			
EP-037	No. 6 Rotary Kiln (1.1 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-016, EP-028, EP-037, and EP-154	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
EP-024, EP-028, EP-131, EP-132, EP-133, EP-135, and EP-154	See Above	Total Metal HAP	Collective Control ≥ 95%	Rule 335-3-11-.06(151)
EP-105	$DeNO_x$ Unit	NO_x	N/A	N/A
All Points	Molecular Sieve Production Line 6 (Permit Unit No. 012)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 6 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to 40 CFR Part 63, Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.	ADEM Admin. Code r. 335-3-11-.06(151)
7. 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 63, Subpart VVVVVV.	ADEM Admin. Code r. 335-3-11-.06(1)
8. This source is subject to Compliance Assurance Monitoring (CAM) requirements.	40 CFR Part 64
9. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 6 (Permit Unit No. 012) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from No. 6 Rotary Kiln (EP-037) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)

Molecular Sieve Production Line 6 Provisos

Federally Enforceable Provisos	Regulations
3. The sulfur dioxide (SO_2) emission rate from the dryer associated with EP-016, the pre-dryer associated with EP-028, No. 6 Rotary Kiln (EP-037), and the dryer associated with EP-154 shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
4. In order to comply with Table 4 of 40 CFR Subpart VVVVVV, the facility shall reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3), (4), or (5).	ADEM Admin. Code r. 335-3-11-.06(151)
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, expect 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
6. The dryer associated with EP-016, the pre-dryer associated with EP-028, No. 6 Rotary Kiln (EP-037), and the dryer associated with EP-154 shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
7. The No. 6 Rotary Kiln (EP-037) shall not operate without venting the process emissions to the Wet Scrubber (EP-133) or to the West Scrubber (EP-133) followed by the $DeNO_x$ Unit (EP-105) for control.	ADEM Admin. Code r. 335-3-14-.04
8. To minimize NO_x emissions, the $DeNO_x$ Unit (EP-105) shall be operated and maintained according to manufacturer's instructions.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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

Molecular Sieve Production Line 6 Provisos

Federally Enforceable Provisos	Regulations
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 6 (EP-015, EP-016, EP-024, EP-037, EP-0131, EP-132, EP-133, EP-134, and EP-135) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. To indicate compliance with CAM requirements, the Pneumatic Transfer System Wet Scrubber (EP-028) and the Baghouse on P&S Dryer (EP-154) shall be checked for visible emissions at least once per day. If visible emissions are observed, corrective action shall be taken immediately.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64
3. To indicate compliance with the requirement to minimize NO_x emissions, the $DeNO_x$ Unit (EP-105) shall be checked for visible emissions at least once per day on at least two days per calendar week while the unit is in operation. If visible emissions are observed, corrective action shall be taken immediately.	ADEM Admin. Code r. 335-3-14-.04
4. Pursuant to 40 CFR 63.11495(a)(3), the facility must conduct inspections of process vessels and equipment for each chemical manufacturing process unit (CMPU) in metal HAP service to determine that the process vessels are sound and free of leaks. The facility must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair, as required by 40 CFR 63.11495(a)(4).	ADEM Admin. Code r. 335-3-11-.06(151)
5. Pursuant to 40 CFR 11495(d), the facility must, at all times, operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	ADEM Admin. Code r. 335-3-11-.06(151)

Molecular Sieve Production Line 6 Provisos

Federally Enforceable Provisos	Regulations
6. The Filter System on No. 6 Kiln (EP-134) shall not operate more than 500 hours per year, determined on a twelve month rolling average.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Molecular Sieve Production Line 6 (EP-015, EP-016, EP-024, EP-037, EP-105, EP-0131, EP-132, EP-133, EP-134, and EP-135) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. For the Pneumatic Transfer System Wet Scrubber (EP-028) and the Baghouse on P&S Dryer (EP-154) the following records shall be maintained and shall be available for inspection for a period of five (5) years: (a) The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. (b) The date, time, and results of each performance test along with any other test conducted on the scrubber/baghouse that provides additional stack pollutant content data. (c) The date and time of each shutdown and startup of Molecular Sieve Production Line 6. (d) Date and type of maintenance that affects air emissions. (e) Date, time, and results of the daily visual emission inspections.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64
3. In accordance with 40 CFR 63.11495(a)(5), the facility shall keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.	ADEM Admin. Code r. 335-3-11-.06(151)
4. In accordance with 40 CFR 63.11501(c)(1)(vii), the facility must maintain records of the date, time, and duration of each malfunction of operation or process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.	ADEM Admin. Code r. 335-3-11-.06(151)

Molecular Sieve Production Line 6 Provisos

Federally Enforceable Provisos	Regulations
5. In accordance with 40 CFR 63.11501(c)(1)(viii), the facility must maintain records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	ADEM Admin. Code r. 335-3-11-.06(151)
6. The facility shall submit semiannual compliance reports in accordance with the requirements stated in 40 CFR 63.11501(d)(1) through (8), as applicable.	ADEM Admin. Code r. 335-3-11-.06(151)
7. The facility shall maintain operation records for the Filter System on No. 6 Kiln (EP-134). The records shall be kept in a permanent form suitable for inspection for a period of at least five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 7

Informational Summary

Description: Produces Pellets to be used as Adsorbents

Permit Unit No.: 014

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	Regulation
EP-051	Baghouse on No. 7 Pneumatic Transfer System	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-052	Baghouse on No. 7 Fines Recycling and Muller			
EP-053	Baghouse on No. 7 Kiln Process, Pellet Forming, and Dryers			
EP-058	No. 7 Rotary Kiln (5.5 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-053 and EP-058	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 7 (Permit Unit No. 014)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 7 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 7 (Permit Unit No. 014) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr, P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from the No. 7 Rotary Kiln (EP-058) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rates from the dryers associated with EP-053 and No. 7 Rotary Kiln (EP-058) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
4. 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, expect 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
5. The dryers associated with EP-053 and No. 7 Rotary Kiln (EP-058) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 7 Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 7 (EP-051, EP-052, EP-053, and EP-058) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Molecular Sieve Production Line 7 (EP-051, EP-052, EP-053, and EP-058) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 8

Informational Summary

Description: Produces Pellets to be used as Adsorbents

Permit Unit No.: 015

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	Regulation
EP-054	Baghouse on No. 8 Pneumatic Transfer System	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-055	Baghouse on No. 8 Fines Recycling			
EP-056	Baghouse on No. 8 Kiln Process, Pellet Forming, and Dryers			
EP-082	No. 8 Rotary Kiln (5.5 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-056 and EP-082	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 8 (Permit Unit No. 015)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 8 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 8 (Permit Unit No. 015) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr, P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from the No. 8 Rotary Kiln (EP-082) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rates from the dryers associated with EP-056 and No. 8 Rotary Kiln (EP-082) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
4. 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, expect 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
5. The No. 8 Rotary Kiln (EP-082) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 8 Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 8 (EP-054, EP-055, EP-056, and EP-082) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Molecular Sieve Production Line 8 (EP-054, EP-055, EP-056, and EP-082) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 9

Informational Summary

Description: Processes Preformed Beads or Mesh through Ion Exchange

Permit Unit No.: 016

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	Regulation
EP-106	Baghouse on No. 9 Line Product Recovery	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-108	Contactor Post Dryer (15 MMBtu/hr)	PM	$E = 1.38H^{-0.44}$	Rule 335-3-4-.03(1)
EP-108	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 9 (Permit Unit No. 016)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 9 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to Compliance Assurance Monitoring (CAM) requirements.	40 CFR Part 64
7. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 9 (Permit Unit No. 016) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from the Contactor Post Dryer (EP-108) shall not exceed the amount determined by the equation: $E = 1.38H^{-0.44}$ Where: E = Emissions in lb/MMBtu H = Heat Input in MMBtu/hr	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rate from the Contactor Post Dryer (EP-108) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01

Molecular Sieve Production Line 9 Provisos

Federally Enforceable Provisos	Regulations
4. 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, expect 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
5. The Contactor Post Dryer (EP-108) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 9 (EP-108) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. To indicate compliance with CAM requirements, the Baghouse on No. 9 Line Product Recovery (EP-106) shall be checked for visible emissions at least once per day. If visible emissions are observed, corrective action shall be taken immediately.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64

Molecular Sieve Production Line 9 Provisos

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Molecular Sieve Production Line 9 (EP-108) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. For Baghouse on No. 9 Line Product Recovery (EP-106) the following records shall be maintained and shall be available for inspection for a period of five (5) years: (a) The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. (b) The date, time, and results of each performance test along with any other test conducted on the baghouse that provides additional stack pollutant content data. (c) The date and time of each shutdown and startup of Molecular Sieve Production Line 9. (d) Date and type of maintenance that affects air emissions. (e) Date, time, and results of the daily visual emission inspections.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64

Molecular Sieve Production Line 10

Informational Summary

Description: Produces Beads to be used as Adsorbents

Permit Unit No.: 017

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	Regulation
EP-096	Venturi Scrubber 20070	PM	0.42 lb/hr	Rule 335-3-14-.04
EP-097	Venturi Scrubber 20395	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-098	Baghouse 20555 on No. 10 Kiln	PM	0.42 lb/hr	Rule 335-3-14-.04
EP-099	Baghouse 20455 on No. 10 Dryer	PM	0.37 lb/hr	Rule 335-3-14-.04
EP-100	No. 10 Dryer (9 MMBtu/hr)	PM	0.58 lb/hr	Rule 335-3-14-.04
EP-101	No. 10 Kiln (7.795 MMBtu/hr)	PM	0.53 lb/hr	Rule 335-3-14-.04
EP-102	Baghouse 20212	PM	0.63 lb/hr	Rule 335-3-14-.04
EP-103	Baghouse on Pneumatic Transfer System (20202)	PM	0.40 lb/ton material transferred	Rule 335-3-14-.04
EP-104	Baghouse on Pneumatic Transfer System (20222)	PM	0.40 lb/ton material transferred	Rule 335-3-14-.04
EP-100 and EP-101	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 10 (Permit Unit No. 017)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 10 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rates from Venturi Scrubber 20070 (EP-096) shall not exceed 0.42 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rates from Venturi Scrubber 20395 (EP-097) shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
3. The particulate matter (PM) emission rate from Baghouse 20555 on No. 10 Kiln (EP-098) shall not exceed 0.42 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
4. The particulate matter (PM) emission rate from Baghouse 20455 on No. 10 Dryer (EP-099) shall not exceed 0.37 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
5. The particulate matter (PM) emission rate from No. 10 Dryer (EP-100) shall not exceed 0.58 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
6. The particulate matter (PM) emission rate from No. 10 Kiln (EP-101) shall not exceed 0.53 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
7. The particulate matter (PM) emission rate from Baghouse 20212 (EP-102) shall not exceed 0.63 lb/hr.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 10 Provisos

Federally Enforceable Provisos	Regulations
8. The particulate matter (PM) emission rate from each of the baghouses on the Pneumatic Transfer System (EP-103 and EP-104) shall not exceed 0.4 lb/ton of material transferred.	ADEM Admin. Code r. 335-3-14-.04
9. The sulfur dioxide (SO_2) emission rates from No. 10 Dryer (EP-100) and No. 10 Kiln (EP-101) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
10. The particulate matter (PM) emission rate from Molecular Sieve Production Line 10 (Permit Unit No. 017) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
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, expect 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
12. The No. 10 Dryer (EP-100) and No. 10 Kiln (EP-101) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
13. The total amount of clay transferred to the Molecular Sieve Production Line 10 (Permit Unit No. 017) shall not exceed 3,160,000 lbs., based on a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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

Molecular Sieve Production Line 10 Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 10 (EP-096, EP-097, EP-098, EP-099, EP-100, EP-101, EP-102, EP-103, and EP-104) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. The amount of clay transferred to Molecular Sieve Production Line 10 shall be calculated once per calendar month and utilized to calculate a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 10 (EP-096, EP-097, EP-098, EP-099, EP-100, EP-101, EP-102, EP-103, and EP-104) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. Records of the amount of clay transferred to the Molecular Sieve Production Line 10 shall be maintained in a permanent form suitable for inspection for a period of at least five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 11

Informational Summary

Description: Produces Activated Powder from a Wet Cake Charge

Permit Unit No.: 018

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	Regulation
EP-109	Baghouse 21845	PM	2.49 lb/hr	Rule 335-3-14-.04
EP-110	Baghouse 21941	PM	0.66 lb/hr	Rule 335-3-14-.04
EP-111	Process Air Heater (5 MMBtu/hr)	PM	0.25 lb/hr	Rule 335-3-14-.04
EP-111	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 11 (Permit Unit No. 018)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 11 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Baghouse 21845 (EP-109) shall not exceed 2.49 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from Baghouse 21941 (EP-110) shall not exceed 0.66 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
3. The particulate matter (PM) emission rate from Process Air Heater (EP-111) shall not exceed 0.25 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
4. The sulfur dioxide (SO_2) emission rate from (EP-111) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01
5. The particulate matter (PM) emission rate from Molecular Sieve Production Line 11 (Permit Unit No. 018) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = Emissions in lb/hr P = Process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)

Molecular Sieve Production Line 11 Provisos

Federally Enforceable Provisos	Regulations
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, expect 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
7. The Process Air Heater (EP-111) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 11 (EP-109, EP-110, and EP-111) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 11 (EP-109, EP-110, and EP-111) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 12

Informational Summary

Description: Produces Beads to be used as Adsorbents

Permit Unit No.: 019

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	Regulation
EP-115	Baghouse on Collector (21060)	PM	0.40 lb/ton material transferred	Rule 335-3-14-.04
EP-116	Baghouse on Collector (21070)	PM	0.40 lb/ton material transferred	Rule 335-3-14-.04
EP-117	Baghouse 21360	PM	0.54 lb/hr	Rule 335-3-14-.04
EP-118	Baghouse 21240	PM	2.17 lb/hr	Rule 335-3-14-.04
EP-119	Baghouse 21370	PM	0.43 lb/hr	Rule 335-3-14-.04
EP-120	No. 12 Kiln (7.795 MMBtu/hr)	PM	0.22 lb/hr	Rule 335-3-14-.04
EP-117, EP-119, and EP-120	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 12 (Permit Unit No. 019)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 12 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from each of the baghouses on the collector (EP-115 and EP-116) shall not exceed 0.4 lb/ton of material transferred.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from Baghouse 21360 (EP-117) shall not exceed 0.54 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
3. The particulate matter (PM) emission rate from Baghouse 21240 (EP-118) shall not exceed 2.17 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
4. The particulate matter (PM) emission rate from Baghouse 21370 (EP-119) shall not exceed 0.43 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
5. The particulate matter (PM) emission rate from No. 12 Kiln (EP-120) shall not exceed 0.22 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
6. The particulate matter (PM) emission rate from Molecular Sieve Production Line 12 (Permit Unit No. 019) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = Emissions in lb/hr P = Process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)

Molecular Sieve Production Line 12 Provisos

Federally Enforceable Provisos	Regulations
7. The sulfur dioxide (SO_2) emission rate from the direct-fired equipment associated with EP-117, the direct-fired equipment associated with EP-119 and No. 12 Kiln (EP-120) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
8. 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, expect 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
9. The No. 12 Kiln (EP-120) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
10. The total amount of clay transferred to the Molecular Sieve Production Line 12 (Permit Unit No. 019) shall not exceed 1,600,000 lbs., based on a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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

Molecular Sieve Production Line 12 Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 12 (EP-115, EP-116, EP-117, EP-118, EP-119, and EP-120) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. The amount of clay transferred to Molecular Sieve Production Line 12 shall be calculated once per calendar month and utilized to calculate a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 12 (EP-115, EP-116, EP-117, EP-118, EP-119, and EP-120) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. Records of the amount of clay transferred to the Molecular Sieve Production Line 12 shall be maintained in a permanent form suitable for inspection for a period of at least five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 14

Informational Summary

Description: Produces Adsorbents through Ion Exchange

Permit Unit No.: 020

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	Regulation
EP-113	Baghouse 13748	PM	3.18 lb/hr	Rule 335-3-14-.04
EP-114A, EP-114B, and EP-114C	Ion Exchange Dryer (6.0 MMBtu/hr) (Zone 1-3 Exhaust)	PM	0.23 lb/hr	Rule 335-3-14-.04
EP-114A, EP-114B, and EP-114C	Ion Exchange Dryer (6.0 MMBtu/hr) (Zone 1-3 Exhaust)	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 14 (Permit Unit No. 020)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 14 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to Compliance Assurance Monitoring (CAM) requirements.	40 CFR Part 64
7. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Baghouse 13748 (EP-113) shall not exceed 3.18 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from the Ion Exchange Dryer (EP-114A, EP-114B, and EP-114C) shall not exceed 0.23 lb/hr, each.	ADEM Admin. Code r. 335-3-14-.04
3. The particulate matter (PM) emission rate from Molecular Sieve Production Line 14 (Permit Unit No. 020) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
4. The sulfur dioxide (SO_2) emission rates from the Ion Exchange Dryer (EP-114A, EP-114B, and EP-114C) shall not exceed 1.8 lb/MMBtu, each.	ADEM Admin. Code r. 335-3-5-.01(1)(a)

Molecular Sieve Production Line 14 Provisos

Federally Enforceable Provisos	Regulations
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, expect 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
6. The Ion Exchange Dryer (EP-114A, EP-114B, and EP-114C) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. To indicate compliance with CAM requirements, Baghouse 13748 (EP-113) shall be checked for visible emissions at least once per day. If visible emissions are observed, corrective action shall be taken immediately.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64
2. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 14 (EP-114A, EP-114B, and EP-114C) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. For Baghouse 13748 (EP-113) the following records shall be maintained and shall be available for inspection for a period of five (5) years: (a) The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. (b) The date, time, and results of each performance test along with any other test conducted on the baghouse that provides additional stack pollutant content data. (c) The date and time of each shutdown and startup of Molecular Sieve Production Line 14. (d) Date and type of maintenance that affects air emissions. (e) Date, time, and results of the daily visual emission inspections.	ADEM Admin. Code r. 335-3-14-.04 & 40 CFR Part 64
2. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for the Molecular Sieve Production Line 14 (EP-114A, EP-114B, and EP-114C) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 15

Informational Summary

Description: Produces beads to be used as adsorbents

Permit Unit No.: 021

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 VVVVVV

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Regulation
EP-122	Baghouse on Mixing and Forming System	PM	0.6 lb/hr	Rule 335-3-14-.04
EP-123	Baghouse on Pneumatic Transfer System	PM	0.40 lb/ton material transferred	Rule 335-3-14-.04
EP-124	No. 15 Belt Dryer (2.4 MMBtu/hr)	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-125	Baghouse on Recycle Material Pulverizer	PM	1.20 lb/hr	Rule 335-3-14-.04
EP-126	Baghouse on No. 15 Kiln	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-127	No. 15 Kiln (6.24 MMBtu/hr)	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-128	Wet Scrubber on No. 15 Kiln	PM	0.30 lb/hr	Rule 335-3-14-.04
EP-122, EP-124, and EP-127	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
EP-122, EP-125, and EP-126	See Above	Total Metal HAP	Collective Control ≥ 95%	Rule 335-3-11-.06(151)
EP-129	DeNOx Unit	NOx	N/A	N/A
All Points	Molecular Sieve Production Line 15 (Permit Unit No. 021)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 15 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to 40 CFR Part 63, Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.	ADEM Admin. Code r. 335-3-11-.06(151)
7. 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 63, Subpart VVVVVV.	ADEM Admin. Code r. 335-3-11-.06(1)
8. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Baghouse on Mixing and Forming System (EP-122) shall not exceed 0.60 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter (PM) emission rate from Baghouse on Pneumatic Transfer System (EP-123) shall not exceed 0.40 lb/ton material transferred.	ADEM Admin. Code r. 335-3-14-.04
3. The particulate matter (PM) emission rate from No. 15 Belt Dryer (EP-124) shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
4. The particulate matter (PM) emission rate from Baghouse on Recycle Material Pulverizer (EP-125) shall not exceed 1.20 lb/hr.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 15 Provisos

Federally Enforceable Provisos	Regulations
5. The particulate matter (PM) emission rate from Baghouse on No. 15 Kiln (EP-126) shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
6. The particulate matter (PM) emission rate from No. 15 Kiln (EP-127) shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
7. The particulate matter (PM) emission rate from Wet Scrubber on No. 15 Kiln (EP-128) shall not exceed 0.30 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
8. The particulate matter (PM) emission rate from Molecular Sieve Production Line 15 (Permit Unit No. 021) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = Emissions in lb/hr, P = Process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
9. The sulfur dioxide (SO_2) emission rates from the direct-fired equipment associated with EP-122, the dryer associated with EP-124, and No. 15 Kiln (EP-127) shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01(1)(a)
10. In order to comply with Table 4 of 40 CFR Subpart VVVVVV, the facility shall reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3), (4), or (5).	ADEM Admin. Code r. 335-3-11-.06(151)
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, expect 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
12. The direct-fired equipment associated with EP-122, the dryer associated with EP-124, and No. 15 Kiln (EP-127) shall be fueled with natural gas only.	ADEM Admin. Code r. 335-3-14-.04
13. To minimize NO_x emissions, the $DeNO_x$ Unit (EP-129) shall be operated and maintained according to manufacturer's instructions.	ADEM Admin. Code r. 335-3-14-.04
14. The total amount of material transferred to the Molecular Sieve Production Line 15 (Permit Unit No. 021) shall not exceed 10,000,000 lbs., based on a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 15 Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter (PM) emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 15 (EP-122, EP-123, EP-124, EP-125, EP-126, EP-127, and EP-128) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
2. Pursuant to 40 CFR 63.11495(a)(3), the facility must conduct inspections of process vessels and equipment for each chemical manufacturing process unit (CMPU) in metal HAP service to determine that the process vessels are sound and free of leaks. The facility must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair, as required by 40 CFR 63.11495(a)(4).	ADEM Admin. Code r. 335-3-11-.06(151)
3. Pursuant to 40 CFR 11495(d), the facility must, at all times, operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	ADEM Admin. Code r. 335-3-11-.06(151)

Molecular Sieve Production Line 15 Provisos

Federally Enforceable Provisos	Regulations
4. To indicate compliance with the requirement to minimize NO_x emissions, the $DeNO_x$ Unit (EP-129) shall be checked for visible emissions at least once per day on at least two days per calendar week while the unit is in operation. If visible emissions are observed, corrective action shall be taken immediately.	ADEM Admin. Code r. 335-3-14-.04
5. The amount of clay transferred to Molecular Sieve Production Line 15 shall be calculated once per calendar month and utilized to calculate a twelve month rolling total.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 15 (EP-122, EP-123, EP-124, EP-125, EP-126, EP-127, EP-128, and EP-129) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
2. In accordance with 40 CFR 63.11495(a)(5), the facility shall keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.	ADEM Admin. Code r. 335-3-11-.06(151)
3. In accordance with 40 CFR 63.11501(c)(1)(vii), the facility must maintain records of the date, time, and duration of each malfunction of operation or process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.	ADEM Admin. Code r. 335-3-11-.06(151)
4. In accordance with 40 CFR 63.11501(c)(1)(viii), the facility must maintain records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	ADEM Admin. Code r. 335-3-11-.06(151)
5. The facility shall submit semiannual compliance reports in accordance with the requirements stated in 40 CFR 63.11501(d)(1) through (8), as applicable.	ADEM Admin. Code r. 335-3-11-.06(151)
6. Records of the amount of material transferred to Molecular Sieve Production Line 15 shall be maintained in a permanent form suitable for inspection for a period of at least five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Molecular Sieve Production Line 2-3-5

Informational Summary

Description: Produces pellets, beads, and/or powders to be used as adsorbents

Permit Unit No.: 022

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	Regulation
EP-043	Baghouse 5363 on Mesh Production	PM	$E = 3.59P^{0.62}$	Rule 335-3-4-.04(1)
EP-044	Bag Collector on Line No. 2			
EP-046	Baghouse on Fines Recycling System			
EP-047	Baghouse on Bead Forming Process			
EP-065	Baghouse on Drying and Calcining Process			
EP-083	Wet Scrubber on Line No. 2			
EP-112	Baghouse 6832 on Line No. 3 Dryer			
EP-032/033	No. 2 Rotary Kiln (2 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-066/067	No. 5 Rotary Kiln (1.78 MMBtu/hr)	PM	0.5 lb/MMBtu	Rule 335-3-4-.03(1)
EP-032/033, EP-066/067, EP-083, and EP-112	See Above	SO_2	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(a)
All Points	Molecular Sieve Production Line 2-3-5 (Permit Unit No. 022)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	Rule 335-3-4-.01

Molecular Sieve Production Line 2-3-5 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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 applicable requirements of ADEM Admin. Code r. 335-3-4-.04(1), Control of Particulate Emissions – Process Industries.	ADEM Admin. Code r. 335-3-4-.04(1)
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03(1), Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.03(1)
5. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
6. This source is subject to synthetic minor PSD emissions limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The particulate matter (PM) emission rate from Molecular Sieve Production Line 2-3-5 (Permit Unit No. 022) shall not exceed the amount determined by the equation: $E = 3.59P^{0.62}$ Where: E = emissions in lb/hr, P = process load rate in tons/hr	ADEM Admin. Code r. 335-3-4-.04(1)
2. The particulate matter (PM) emission rate from No. 2 Rotary Kiln (EP-032/033) and No. 5 Rotary Kiln (EP-066/067) shall not exceed 0.5 lb/MMBtu.	ADEM Admin. Code r. 335-3-4-.03(1)
3. The sulfur dioxide (SO_2) emission rate from No. 2 Rotary Kiln (EP-032/033), No. 5 Rotary Kiln (EP-066/067), the direct-fired equipment associated with EP-083, and the dryer associated with EP-112 shall not exceed 1.8 lb/MMBtu.	ADEM Admin. Code r. 335-3-5-.01(1)
4. 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, expect 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

Molecular Sieve Production Line 2-3-5 Provisos

Federally Enforceable Provisos	Regulations
5. The No. 2 Rotary Kiln (EP-032/033), No. 5 Rotary Kiln (EP-066/067), the direct-fired equipment associated with EP-083, and the dryer associated with EP-112 shall be fueled by natural gas only.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate emission rates shall be determined by EPA Reference Method 5 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. Compliance with the sulfur dioxide (SO_2) emission rates shall be determined by EPA Reference Method 6 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
3. 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
Emission Monitoring	
1. As an indicator of compliance with the particulate matter (PM) emission rate and the opacity standard, the emission points associated with Molecular Sieve Production Line 2-3-5 (EP-032/033, EP-043, EP-044, EP-046, EP-047, EP-065, EP-066/067, EP-083, and EP-112) shall be checked for visible emissions at least once per day on at least two days per calendar week while the equipment is in operation. If visible emissions are observed, the facility shall initiate corrective action within one (1) hour of discovery. Periods when visible emissions are present may not be certified as "in compliance" with the particulate emission standard.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the date, time, results, and any corrective action taken during the weekly visual emission inspections for Molecular Sieve Production Line 2-3-5 (EP-032/033, EP-043, EP-044, EP-046, EP-047, EP-065, EP-066/067, EP-083, and EP-112) shall be maintained and shall be available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Emergency Engines

Informational Summary

Description: One Emergency Firewater Pump, One Emergency Generator, and One Water Supply Booster

Permit Unit No.: 023

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

40 CFR Part 60, Subpart IIII
40 CFR Part 63, Subpart ZZZZ
40 CFR Part 63, Subpart CCCCCC

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Regulation
EP-146	Firewater Pump Emergency Engine (517 HP)	NO_x + NMHC	4.0 g/KW-hr	Rule 335-3-10-.02(87)
EP-146	See Above	PM	0.2 g/KW-hr	Rule 335-3-10-.02(87)
EP-147	Standby Generator Emergency Engine (64 HP)	HAPs	No Specific Requirements	Rule 335-3-11-.06(103)
EP-148	Water Supply Booster Emergency Engine (215 HP)	HAPs	No Specific Requirements	Rule 335-3-11-.06(103)
EP-150	Gasoline Tank (550 gallons)		N/A	40 CFR Part 63, Subpart CCCCCC
All Points	Emergency Engines (Permit Unit No. 023)	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	

Emergency Engines Provisos

Federally Enforceable Provisos	Regulations
Applicability	
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. The Firewater Pump (EP-146) is subject to 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	ADEM Admin. Code r. 335-3-10-.02(87)
4. The Firewater Pump (EP-146) 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 IIII.	ADEM Admin. Code r. 335-3-10-.02(1)
5. All of the emergency engines (EP-146, EP-147, and EP-148) are subject to 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.	ADEM Admin. Code r. 335-3-11-.06(103)
6. All of the emergency engines (EP-146, EP-147, and EP-148) 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.	ADEM Admin. Code r. 335-3-11-.06(1)
7. The Firewater Pump (EP-146) is subject to the National Emission Standards for Hazardous Pollutants for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ). Compliance with 40 CFR Part 60, Subpart IIII shall constitute compliance with this requirement.	ADEM Admin. Code r. 335-3-10-.02(87)
8. This source is subject to the applicable requirements of 40 CFR Part 63, Subpart CCCCCC, "National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities" upon promulgation of the final rule.	40 CFR Part 63, Subpart CCCCCC
Emission Standards	
1. The sum of non-methane hydrocarbon (NMHC) and nitrogen oxides (NO_x) emission rates from Firewater Pump (EP-146) shall not exceed 4.0 g/KW-hr as indicated in Table 4 of 40 CFR Part 60, Subpart IIII.	ADEM Admin. Code r. 335-3-10-.02(87)

Emergency Engines Provisos

Federally Enforceable Provisos	Regulations
2. The particulate matter (PM) emission rate from Firewater Pump (EP-146) shall not exceed 0.2 g/KW-hr as indicated in Table 4 of 40 CFR Part 60, Subpart IIII.	ADEM Admin. Code r. 335-3-10-.02(87)
3. The Firewater Pump (EP-146) and the Standby Generator (EP-147) shall be fueled by diesel fuel that meets the requirements of 40 CFR 80.510(b).	ADEM Admin. Code r. 335-3-10-.02(87) and 335-3-11-.06(103)
4. In accordance with §60.4211(f) for the Firewater Pump (EP-146) and §63.6640(f) for the Standby Generator (EP-147) and Water Supply Booster (EP-148) the emergency engines shall only operate as specified below: (a) Emergency situations. (b) Maintenance checks and readiness testing not to exceed 100 hours per year (c) Non-emergency situations, not to exceed 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 use for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.	ADEM Admin. Code r. 335-3-10-.02(87) and 335-3-11-.06(103)
5. In accordance with 40 CFR 63.6603(a), the Standby Generator (EP-147) and the Water Supply Booster (EP-148) shall meet the requirements in Table 2d as specified below: (a) Change oil and filter every 500 hours of operation or annually, whichever comes first. (b) Inspect air cleaner/spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	ADEM Admin Code r. 335-3-11-.06(103)
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, expect 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

Emergency Engines Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
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
2. The facility must operate and maintain the emergency engines (EP-146, EP-147, and EP-148) 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.	ADEM Admin. Code r. 335-3-10-.02(87) and 335-3-11-.06(103)
3. The Firewater Pump (EP-146) shall be certified according to 40 CFR Part 60, Subpart IIII for the same model year and maximum engine power.	ADEM Admin. Code r. 335-3-10-.02(87)
4. The Firewater pump (EP-146) shall be installed and configured according to the manufacturer's specifications.	ADEM Admin. Code r. 335-3-10-.02(87)
Emission Monitoring	
1. In accordance with §60.4209(a), the Firewater Pump (EP-146) must have a non-resettable hour meter installed prior to startup of the engine.	ADEM Admin. Code r. 335-3-10-.02(87)
2. In accordance with §63.6625(f), the Standby Generator (EP-147) and the Water Supply Booster (EP-148) must have a non-resettable hour meter installed prior to startup of the engine.	ADEM Admin Code r. 335-3-11-.06(103)
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 retained onsite for inspection purposes for a period of at least 5 years.	ADEM Admin. Code r. 335-3-10-.02(87) and 335-3-11-.06(103)
2. Records of maintenance conducted on the emergency engines shall be retained onsite for inspection purposes for a period of at least five (5) years.	ADEM Admin. Code r. 335-3-10-.02(87) and 335-3-11-.06(103)

APPENDIX A
(CAM)

Compliance Assurance Monitoring Requirements

CAM Plan for Wet Scrubber 11190
(EP-028)

I. Indicator	Visible emissions
Measurement Approach	Visible emission checks and routine inspection and maintenance program
II. Indicator Range	An excursion is defined as any opacity reading greater than 0%.
III. Performance Criteria	
A. Representative Data	Observations are made at the scrubber outlet.
B. Verification of Operational Status	Verification in control room
C. QA/QC Practices and Criteria	Maintain and operate the scrubber using procedures that take into account any manufacturer's specifications.
D. Monitoring Frequency	Once daily during operation
Data Collection Procedures	1. The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. 2. The date, time, and results of each performance test along with any other test conducted on the scrubber that provides additional stack pollutant content data. 3. The date and time of each shutdown and startup of Molecular Sieve Production Line 6. 4. Date and type of maintenance that affects air emissions. 5. Date, time, and results of the daily visual emission inspections.
Averaging Period	N/A

CAM Plan for Baghouse 15218
(EP-106)

I. Indicator	Visible emissions
Measurement Approach	Visible emission checks and routine inspection and maintenance program
II. Indicator Range	An excursion is defined as any opacity reading greater than 0%.
III. Performance Criteria	
A. Representative Data	Observations are made at the baghouse outlet.
B. Verification of Operational Status	Verification in control room
C. QA/QC Practices and Criteria	Maintain and operate the baghouse using procedures that take into account any manufacturer's specifications.
D. Monitoring Frequency	Once daily during operation
Data Collection Procedures	1. The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. 2. The date, time, and results of each performance test along with any other test conducted on the baghouse that provides additional stack pollutant content data. 3. The date and time of each shutdown and startup of Molecular Sieve Production Line 9. 4. Date and type of maintenance that affects air emissions. 5. Date, time, and results of the daily visual emission inspections.
Averaging Period	N/A

CAM Plan for Baghouse 13748
(EP-113)

I. Indicator	Visible emissions
Measurement Approach	Visible emission checks and routine inspection and maintenance program
II. Indicator Range	An excursion is defined as any opacity reading greater than 0%.
III. Performance Criteria	
A. Representative Data	Observations are made at the baghouse outlet.
B. Verification of Operational Status	Verification in control room
C. QA/QC Practices and Criteria	Maintain and operate the baghouse using procedures that take into account any manufacturer's specifications.
D. Monitoring Frequency	Once daily during operation
Data Collection Procedures	1. The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. 2. The date, time, and results of each performance test along with any other test conducted on the baghouse that provides additional stack pollutant content data. 3. The date and time of each shutdown and startup of Molecular Sieve Production Line 14. 4. Date and type of maintenance that affects air emissions. 5. Date, time, and results of the daily visual emission inspections.
Averaging Period	N/A

CAM Plan for Baghouse on P&S Dryer
(EP-154)

I. Indicator	Visible emissions
Measurement Approach	Visible emission checks and routine inspection and maintenance program
II. Indicator Range	An excursion is defined as any opacity reading greater than 0%.
III. Performance Criteria	
A. Representative Data	Observations are made at the baghouse outlet.
B. Verification of Operational Status	Verification in control room
C. QA/QC Practices and Criteria	Maintain and operate the baghouse using procedures that take into account any manufacturer's specifications.
D. Monitoring Frequency	Once daily during operation
Data Collection Procedures	1. The date, starting time, and duration of each deviation from the monitoring requirements specified in the monitoring section along with the cause and corrective action taken. 2. The date, time, and results of each performance test along with any other test conducted on the baghouse that provides additional stack pollutant content data. 3. The date and time of each shutdown and startup of Molecular Sieve Production Line 6. 4. Date and type of maintenance that affects air emissions. 5. Date, time, and results of the daily visual emission inspections.
Averaging Period	N/A