ADEM
Alabama Department of Environmental Management

MAJOR SOURCE OPERATING PERMIT

Permitee: **ASCEND PERFORMANCE MATERIALS, LLC**

Facility Name: **ASCEND PERFORMANCE MATERIALS OPERATIONS, LLC**

Facility No.: 712-0010

Location: DECATUR, MORGAN COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, ***Code of Alabama 1975****, §§22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended,* ***Code of Alabama 1975****, §§22-22A-1 to 22-22A-15, 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 below.*

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: XXXX XX, 2013

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Alabama Department of Environmental Management

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General Permit Provisos

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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.	Rule 335-3-16-.12(2)
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.	
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 that meets the requirements of Rule 335-3-16-.04(9). 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	Rule 335-3-16-.07(b)

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representatives of the Alabama Department of Environmental Management and EPA to conduct the following:	
(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 no later than August XX of each calendar 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) used for determining the compliance status of the source, currently and over the reporting	

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period consistent with Rule 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);	
(4) Whether compliance has been continuous or intermittent; and	
(5) Such other facts as the Department may require to determine the compliance status of the source.	
(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:	
Air and EPCRA Enforcement Branch 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:	Rule 335-3-16-.13(5)
(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	

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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.	
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), Code of Alabama 1975, as amended
15. <u>Equipment Maintenance or Breakdown</u>	
(a) In the case of shutdown for more than 1 hour of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director 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. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating. 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 for a period exceeding one hour in such a manner	

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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 shall be notified when the breakdown has been corrected.	
16. <u>Operation of Capture and Control Devices</u>	
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
17. <u>Obnoxious Odors</u>	
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. <u>Fugitive Dust</u>	
Reasonable precautions to prevent fugitive dust shall be taken so that provisions of the Department's rules and regulations shall not be violated.	Rule 335-3-4-.02
19. <u>Additions and Revisions</u>	
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. <u>Recordkeeping Requirements</u>	
(a) Records of required monitoring information of the source shall, where appropriate, include the following:	Rule 335-3-16-.05(c)2.
(1) The date, place, and time of all sampling or measurements;	

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(2) The date analyses were performed;	
(3) The company or entity that performed the analyses;	
(4) The analytical techniques or methods used;	
(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.	
(c) The Permittee shall conduct monitoring in accordance with the specific provisions of the permit, provided that no monitoring is required when the process or emission source is not operating.	
21. <u>Reporting Requirements</u>	
(a) Reports to the Department of any required monitoring shall be submitted at least every six months. The reports shall be submitted within 60 days following the end of the six month period. 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	Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)

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established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. As allowed in MACT and other regulations, flexibility is provided to use alternative test methods, as approved by EPA, ADEM or permit condition.	
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
(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 or an alternative time is specified by an applicable regulation.	
23. <u>Payment of Emission Fees</u>	
Annual emission fees shall be remitted each year according to the	Rule 335-1-7-.04

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fee schedule in ADEM Admin. Code R. 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.	40 CFR Part 82
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.	
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. <u>Chemical Accidental Prevention Provisions</u>	
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,	

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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 be made 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 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)
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.	Rule 335-3-4-.03
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

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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 requirments as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in Item 13 of the application's ADEM Form 103 for this permit. Under this shield, it has been determined that requirments 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).	
(2) Proper maintenance. At all times, except as identified in (a)(3), the owner or operator shall maintain monitoring equipment. This includes, but is 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	

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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. (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	

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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 33(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.	
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:	

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(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 33(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.	
(c) Reporting and Recordkeeping Requirements	40 CFR 64.9
(1) General reporting requirements A. On and after the date specified in Section 33(a)(1) above by which the owner or operator must use	

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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 33(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 33(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
(1) 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.	

ADN Unit
Informational Summary

Description: Adiponitrile (ADN) Manufacturing Unit

Emission Unit No: 028

Installation Date: 1964 **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 60 Subpart VV, NNN, RRR **Part 63 Subpart F, G, H, FFFF**

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
ADN 104	Reactor A Off-gas Absorber	VOC	≤ 1.71 lb/hr	335-3-14
ADN 105	Reactor B Off-gas Absorber	VOC	≤ 2.85 lb/hr	335-3-14
ADN 106	Reactor C Off-gas Absorber	VOC	≤ 2.66 lb/hr	335-3-14
ADN 107	Reactor D Off-gas Absorber	VOC	≤ 3.30 lb/hr	335-3-14
ADN 114	Non-Sequestered (NSQ) Absorber	VOC	≤ 1.01 lb/hr	335-3-14
ADN 102	Area 403 Refining/ Recovery Absorber	VOC	≤ 0.61 lb/hr	335-3-14
ADN 109	Area 411 Tank Farm Absorber	VOC	≤ 0.16 lb/hr	335-3-14
ADN 103	Area 402 Synthesis Vent Absorber	VOC	≤ 0.28 lb/hr	335-3-14
	ADN Process Unit	OHAP	HON Subpart H LDAR Program	335-3-11-.06(7)
	ADN Process Unit	OHAP	HON Subparts F & G	335-3-11-.06(5), (6)
ADN 101	Refining/ Recovery Sump Vent	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 102	Area 403 Refining/ Recovery Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 103	Area 402 Synthesis Vent Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 104	Reactor A Off-gas Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 105	Reactor B Off-gas Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 106	Reactor C Off-gas Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 107	Reactor D Off-gas Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)

ADN Unit
Provisos

ADN 108	Electrolyte Filtration Sump	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 109	Area 411 Tank Farm Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 110	Cell Package Building Vent	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 112	Synthesis Sump Vent	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 113	Package Decontamination Emissions	OHAP	TRE > 4.0	335-3-11-.06(6)
ADN 114	Non-Sequestered (NSQ) Absorber	OHAP	TRE > 4.0	335-3-11-.06(6)
	ADN Unit	VOCs	NSPS, Subpart VV LDAR Program	335-3-10-.02(48)
ADN 104 – ADN 107	A-D Reactor Off-Gas Absorbers	VOCs	TRE > 8.0	335-3-10-.02(70)
ADN 102	Precut, PN Purge, PN Refiner, and Area 401 Low Boiler Stripper Columns vented to the 403 Absorber	VOCs	TRE > 8.0	335-3-10-.02(66)
ADN 114	North and South Prestripper Columns vented to the NSQ Absorber	VOC	TRE > 8.0	335-3-10-.02(66)

ADN Unit
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.	335-3-16-.03
2. This source is subject to synthetic minor PSD emission limitations.	335-3-14-.04
3. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60 Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart VV, NNN or RRR, as applicable.	335-3-10-.02(1)
4. The ADN Process Unit is subject to the Federal New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified in 40 CFR Part 60, Subpart VV.	335-3-10-.02(48)
5. Reactor Systems A – D are subject to the Federal New Source Performance Standards (NSPS) for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes, as specified in 40 CFR Part 60, Subpart RRR.	335-3-10-.02(70)
6. The Precut Column, the Propionitrile (PN) Purge Distillation Column, the Propionitrile (PN) Refiner Column, the Area 401 Low Boiler Stripper Column, the North Prestripper Column, and the South Prestripper Column are subject to the requirements of the Federal New Source Performance Standards (NSPS) for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, as specified in 40 CFR Part 60, Subpart NNN.	335-3-10-.02(66)
7. This source is 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 F, G, and H, as applicable.	335-3-11-.06(1)
8. This source is subject to the requirements of the Hazardous Organic NESHAP, as specified in 40 CFR Part 63, Subparts F, G, and H.	335-3-11-.06(5),(6), (7)
9. The Quaternary Ammonium (QA) batch process is subject to the requirements of the Miscellaneous Organic NESHAP, as specified in 40 CFR Part 63, Subpart FFFF.	335-3-11-.06(83)
Emission Standards	
1. The VOC emission rate from the Reactor A Off-gas Absorber (ADN104) shall not exceed 1.71 lb/hr.	335-3-14

ADN Unit
Provisos

Federally Enforceable Provisos	Regulations
2. The VOC emission rate from the Reactor B Off-gas Absorber (ADN105) shall not exceed 2.85 lb/hr.	335-3-14
3. The VOC emission rate from the Reactor C Off-gas Absorber (ADN106) shall not exceed 2.66 lb/hr.	335-3-14
4. The VOC emission rate from the Reactor D Off-gas Absorber (ADN107) shall not exceed 3.30 lb/hr.	335-3-14
5. The VOC emission rate from the Non-Sequestered Absorber (ADN114) shall not exceed 1.01 lb/hr.	335-3-14
6. The VOC emission rate from the Area 403 Refining/Recovery Absorber (ADN102) shall not exceed 0.61 lb/hr.	335-3-14
7. The VOC emission rate from the Area 411 Tank Farm Absorber (ADN109) shall not exceed 0.16 lb/hr.	335-3-14
8. The VOC emission rate from the Area Synthesis Vent Absorber (ADN103) shall not exceed 0.28 lb/hr.	335-3-14
9. The standards for the leak detection and repair program of 40 CFR Part 63 Subpart H, as listed in 63.162 – 63.179, shall be met.	335-3-11-.06(7)
10. The TRE index values of the following process vents shall be maintained at greater than 1.0 at the outlet of the recovery device as specified in 63.113(a)(3) of Subpart G of the HON: ADN 101, ADN 102, ADN 103, ADN 104, ADN 105, ADN 106, ADN 107, ADN 108, ADN 109, ADN 110, ADN 112, ADN 113, ADN 114.	335-3-11-.06(6)
11. As specified in 63.113(e) of Subpart G of the HON, the TRE index values of the following process vents shall be maintained at greater than 4.0 such that only the requirements of 63.115, 63.117, 63.118(c), and 63.118(h) must be followed in 63.114 through 63.118: ADN 101, ADN 102, ADN 103, ADN 104, ADN 105, ADN 106, ADN 107, ADN 108, ADN 109, ADN 110, ADN 112, ADN 113, ADN 114.	335-3-11-.06(6)
12. As specified in 63.2460(b)(6)(i) of Subpart FFFF of the MON, the uncontrolled organic HAP emissions for the QA process vents shall less than 10,000 lbs/yr such that the requirements of 63.2520(d) must be followed.	335-3-11-.06(83)
13. The HON Wastewater Streams in this unit, the AN Recovery Tails and the Purge Evaporator Tails, have been classified as Group 2 sources and therefore must only comply with the applicable recordkeeping and reporting requirements of 63.146 and 63.147 of the HON wastewater requirements.	335-3-11-.06(6)

Federally Enforceable Provisos	Regulations
14. The requirements of 63.104 of the HON for heat exchange systems and the requirements of 63.105 of the HON for maintenance wastewater shall be followed, as applicable.	335-3-11-.06(5)
15. The Standards for the Leak Detection and Repair Program of Subpart VV, as listed in 40 CFR 60.482-1 through 60.483-2, shall be followed, as applicable.	335-3-10-.02(48)
16. The TRE index values of the A- D Reactor Systems shall be maintained at greater than 1.0 without the use of a VOC emission control device as specified in 60.702(c) of NSPS, Subpart RRR.	335-3-10-.02(70)
17. As specified in 60.700(c)(2) of NSPS, Subpart RRR, the TRE index values of the A – D Reactor Systems shall be maintained at greater than 8.0 such that only the requirements of 60.702(c), 60.704(d), (e), and (f), and 60.705(g), (l)(1), (l)(6), and (t) of Subpart RRR are applicable.	335-3-10-.02(70)
18. The TRE index values of the following distillation columns shall be maintained at greater than 1.0 without the use of a VOC emission control device as specified in 60.662(c) of NSPS, Subpart NNN: the Precut Column, the Propionitrile (PN) Purge Distillation Column, the Propionitrile (PN) Refiner Column, the Area 401 Low Boiler Stripper Column, the North Prestripper Column, and the South Prestripper Column.	335-3-10-.02(66)
19. As specified in 60.660(c)(4) of NSPS, Subpart NNN, the TRE index values of the following distillation columns shall be maintained at greater than 8.0 such that only the requirements of 60.662, 60.664(d), (e), and (f), and 60.665(h) and (l) of Subpart NNN are applicable: the Precut Column, the Propionitrile (PN) Purge Distillation Column, the Propionitrile (PN) Refiner Column, the Area 401 Low Boiler Stripper Column, the North Prestripper Column, and the South Prestripper Column.	335-3-10-.02(66)
Compliance and Performance Test Methods and Procedures	
1. Compliance with VOC emission rates shall be determined by Reference Method 18 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
2. The methods and procedures for process vent group determinations listed in 63.115 and the performance test methods for process vents as listed in 63.116 of Subpart G of the HON shall be followed.	335-3-11-.06(7)
3. The test methods and procedures for determining wastewater applicability, Group 1/Group 2 determinations and compliance as specified in 63.144 and 63.145 of Subpart G of the HON shall be followed, as applicable.	335-3-11-.06(6)

Federally Enforceable Provisos	Regulations
4. The test methods and procedures for the Subpart VV LDAR program shall be followed as specified in 60.485, as applicable.	335-3-10-.02(48)
5. The test methods and procedures for the leak detection and repair program as listed in 63.180 of Subpart H of the HON shall be followed.	335-3-11-.06(7)
6. The test methods and procedures of 60.704(d) – (f) of NSPS, Subpart RRR shall be followed, as applicable.	335-3-10-.02(70)
7. The test methods and procedures of 60.664(d) – (f) of NSPS, Subpart NNN shall be followed, as applicable.	335-3-10-.02(66)
8. The test methods and procedures for determining Group1/Group2 status for the QA process shall be followed as specified in 63.2460(b).	335-3-11-.06(83)
9. The monitoring plan detailed in the December 23, 1992 letter from this Department shall be utilized to determine compliance with the anti-PSD VOC emission limits on the Reactor A-D Off-gas Absorbers (ADN 104 – ADN 107).	335-3-14-.04
10. The monitoring plan detailed in the November 1, 1994 letter from this facility to the Department shall be utilized to determine compliance with the anti-PSD VOC emission limits on the Nonsequestered Absorber, the Area 403 Refining/Recovery Absorber, the Area 411 Tank Farm Absorber, and the Area 402 Synthesis Vent Absorber (ADN 114, 102, 109, 103).	335-3-14-.04
Emission Monitoring	
1. To determine compliance with the anti-PSD VOC emission limits on the Reactor A-D Off-gas Absorbers (ADN 104 – ADN 107) the monitoring plan detailed in the Department's December 23, 1992, letter shall be followed. Continuous monitoring of the lean solvent AN concentration, temperature, and flow is required. Calculations of the maximum allowable lean solvent temperature shall be performed. The lean solvent AN concentration shall not exceed 500 ppm, the lean solvent temperature shall not exceed the calculated maximum allowable lean solvent temperature, and the minimum lean solvent flows shall be as indicated below, based upon the noted lean solvent temperatures:	335-3-14-.04

Lean Solvent Temperature (°C)	Minimum Lean Solvent Flow (kpph/kAmp)
20	0.89
25	0.90
30	1.02
35	1.10

Federally Enforceable Provisos	Regulations
40 | 1.20	
Exceedances are defined as any period when the above listed limitations are exceeded for a period of greater than 3-hours.	
2. To determine compliance with the anti-PSD VOC emission limits on the Nonsequestered Absorber (ADN 114), the Area 403 Refining/Recovery Absorber (ADN 102), the Area 411 Tank Farm Absorber (ADN 109), and the Area 402 Synthesis Vent Absorber (ADN 103), the monitoring plan detailed in the November 1, 1994, letter from this facility to the Department shall be followed. Continuous monitoring of the lean solvent AN concentration, temperature, and flow is required. Calculations of the maximum allowable lean solvent AN concentration shall be performed. The actual lean solvent AN concentration shall not exceed the calculated allowable AN concentration for a duration greater than 3 hours.	335-3-14-.04
Recordkeeping and Reporting Requirements	
1. The reporting and recordkeeping requirements for process vent group and TRE determinations and performance tests shall be followed as indicated in 63.117(b) of the HON, as applicable.	335-3-11-.06(6)
2. Readily accessible records of any process changes and any recalculation of the TRE index values for the process vents in this unit, shall be maintained as required by 63.118(c) of the HON.	335-3-11-.06(6)
3. Whenever a process change is made which causes the TREs of the Group 2 process vents to become less than 4.0, a report as specified in 63.118(h) of the HON shall be submitted within 180 days after the process change.	335-3-11-.06(6)
4. The reporting and recordkeeping requirements for the HON wastewater streams shall be followed as specified in 63.146 and 63.147 of the HON.	335-3-11-.06(6)
5. The recordkeeping and reporting requirements of 63.181 and 63.182 of Subpart H of the HON shall be followed, as applicable.	335-3-11-.06(7)
6. Semiannual Subpart H HON Reports shall be submitted in accordance with 63.182(d).	335-3-11-.06(7)
7. The recordkeeping and reporting requirements of 63.2520 of Subpart FFFF of the MON shall be followed for the QA process, as applicable.	
8. The recordkeeping and reporting requirements for the Subpart VV LDAR program shall be followed as indicated in 60.486 and 60.487.	335-3-10-.02(48)

Federally Enforceable Provisos	Regulations
9. Semiannual Subpart VV Reports shall be submitted in accordance with 60.487(c).	335-3-10-.02(48)
10. The reporting and recordkeeping requirements of 60.705(g), (l)(1), (l)(6), and (t) of NSPS, Subpart RRR shall be followed, as applicable.	335-3-10-.02(70)
11. Semi-annual reports of TRE recalculations as specified in 60.705(l)(1) and (l)(6) of NSPS, Subpart RRR shall be submitted.	335-3-10-.02(70)
12. The reporting and recordkeeping requirements of 60.665(h) and (l) of NSPS, Subpart NNN shall be followed, as applicable.	335-3-10-.02(66)
13. Semi-annual reports of TRE recalculations as specified in 60.665(l) shall be submitted.	335-3-10-.02(66)
14. Records of the lean solvent AN concentration, temperature, flow, and calculated maximum temperature for the A-D Reactor System Absorbers shall be maintained and be readily available for inspection for a period of five years in accordance with the December 23, 1992, monitoring plan. These records shall also include the periods when the limitations were exceeded and the reason for the exceedance, if known.	335-3-14-.04
15. Records of the lean solvent AN concentration, temperature, flow, and calculated maximum allowable AN concentration for the Area 403 Refining/Recovery Absorber, Area 411 Tank Farm Absorber, Synthesis Vent Absorber, and Nonsequestered Absorber shall be maintained and be readily available for inspection for a period of five years in accordance with the November 1, 1994, monitoring plan. These records shall also include the periods when the limitation is exceeded and the reason for the exceedance, if known.	335-3-14-.04
16. Semi-annual reports shall be submitted of any exceedances under the November 1, 1994, and December 23, 1992, monitoring plans. These reports shall be submitted within 60 days after the end of each six month period and shall include details of the exceedance including the period when the exceedance occurred, and the reason, if known.	335-3-14-.04

ADN Tanks
Informational Summary

Description: Adiponitrile (ADN) Unit Tanks Subject to NSPS, Subpart Kb

Emission Unit No: 029, 030, 035, 036, 037, 038, 039, 040, 050, 090

Installation Date: **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 60 Subpart Kb

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
038 (ADN 315)	45,000 Gallon Waste Release Tank (FI402TA4126-757)	VOC	Subpart Kb	335-3-10-.02(9)(b)
039 (ADN 316)	45,000 Gallon Waste Release Tank (FI402TA4126-758)	VOC	Subpart Kb	335-3-10-.02(9)(b)
040 (ADN 318)	34,000 Gallon Spent Acid Tank (FI402TA4126-766)	VOC	Subpart Kb	335-3-10-.02(9)(b)
090 (ADN 344)	10,900 Gallon QAOH Tank (401TA1-201)	VOC	Subpart Kb	335-3-10-.02(9)(b)
050 (ADN 359)	64,000 Gallon Spent Acid Tank (402TA-959)	VOC	Subpart Kb	335-3-10-.02(9)(b)
029 (ADN 382)	23,700 Gallon Reaction Product Mixture Tank (FI402TA4126-612)	VOC	Subpart Kb	335-3-10-.02(9)(b)
035 (ADN 383)	32,000 Gallon 1X Feed Tank (FI402TA4126-728)	VOC	Subpart Kb	335-3-10-.02(9)(b)
036 (ADN 384)	32,000 Gallon Treated Electrolyte Tank (FI402TA4126-783)	VOC	Subpart Kb	335-3-10-.02(9)(b)
037 (ADN 385)	53,000 Gallon Shutdown Tank (FI402TA4126-759)	VOC	Subpart Kb	335-3-10-.02(9)(b)
030 (ADN 301)	420,000 Gallon PNT Waste Tank (FI400TAO-001A)	VOC	Subpart Kb	335-3-10-.02(9)(b)

ADN Tanks
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.	335-3-16-.03
2. These sources are 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 Kb.	335-3-10-.02(1)
3. These sources are subject to the Federal New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, as specified in 40 CFR Part 60, Subpart Kb.	335-3-10-.02(9)(b)
Emission Standards	
1. The maximum true vapor pressure of VOLs stored in each of the following storage tanks, which have capacities greater than or equal to 151 m^3 (39,889 gallons), shall be less than 3.5 kPa (0.5 psia) such that only the requirements of 60.116b(a) and (b) of Subpart Kb are applicable: *ADN315, ADN316, ADN 359, ADN 385*	335-3-10-.02(9)(b)
2. The maximum true vapor pressure of VOLs stored in each of the following storage tanks, which have capacities greater than or equal to 151 m^3 (39,889 gallons), shall be less than 3.5 kPa (0.5 psia) such that only the requirements of 60.116b(a) and (b) of Subpart Kb are applicable: *ADN 318, ADN 382, ADN 383, ADN 384*	335-3-10-.02(9)(b)
3. Tank ADN 301 shall meet the standards for VOC control as indicated in 60.112b of Subpart Kb, as applicable.	335-3-10-.02(9)(b)
4. Tank ADN 301 shall be equipped with an internal floating roof which meets the requirements of 60.112b(1) of Subpart Kb.	335-3-10-.02(9)(b)
Compliance and Performance Test Methods and Procedures	
1. The methods and procedures for determining the maximum true vapor pressures of the materials stored in the above noted storage tanks shall be in accordance with 60.111b(f) of Subpart Kb.	335-3-10-.02(9)(b)
2. The testing and procedures of 60.113b(a) of Subpart Kb shall be followed for Tank ADN 301.	335-3-10-.02(9)(b)

ADN Tanks
Provisos

Federally Enforceable Provisos	Regulations
3. Determinations of the maximum true vapor pressure of the materials stored in Tank ADN 301 shall be determined in accordance with 60.116b(e) or 60.116b(f) of Subpart Kb, as applicable.	335-3-10-.02(9)(b)
Emission Monitoring	
1. Tank ADN 301 shall be inspected as indicated in 60.113b(a)(3) of Subpart Kb.	335-3-10-.02(9)(b)
2. Tank ADN 301 shall be visually inspected at least every 5 years as indicated in 60.113b(a)((4) or shall be inspected at least once every 12 months as indicated in 60.113b(a)(2), as required under 60.113b(a)(3) of Subpart Kb.	335-3-10-.02(9)(b)
3. If annual inspections of Tank ADN 301 are conducted according to 60.113b(a)(2), inspections as specified in 60.113b(a)(4) shall be conducted at intervals no greater than 10 years apart, as required by 60.113b(a)(4).	335-3-10-.02(9)(b)
Recordkeeping and Reporting Requirements	
1. The recordkeeping requirements of 60.116b(a) and (b) shall be followed for each of these sources.	335-3-10-.02(9)(b)
2. Readily accessible records showing the dimensions and an analysis showing the capacity of each storage vessel shall be maintained for the life of the source.	335-3-10-.02(9)(b)
3. Notification to the Administrator shall be made in accordance with 60.113b(a)(5) of Subpart Kb, prior to filling or refilling Tank ADN 301.	335-3-10-.02(9)(b)
4. The reporting and recordkeeping requirements of 60.115b(a) shall be met for Tank ADN 301. The records required under 60.115b shall be maintained for at least 2 years.	335-3-10-.02(9)(b)
5. A record of the VOL stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period in Tank ADN 301 shall be maintained as required by 60.116b(c) of Subpart Kb.	335-3-10-.02(9)(b)

ADN Group 1 Tanks
Informational Summary

Description: Adiponitrile (ADN) Group 1 HON Tanks

Emission Unit No: 028, 046, 094, 097, 102, Tanks 97 and 98

Installation Date: **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 63 Subpart F, G

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
028 (ADN 302)	3,050,000 Gallon No. 3 Bulk AN External Floating Roof Tank (FI039TA9-201)	VOC	HON G (Group 1)	335-3-11-.06(6)
097 (ANT 63)	1,100,000 Gallon No. 1 Bulk AN External Floating Roof Tank (FI233TA039-030)	VOC	HON G (Group 1)	335-3-11-.06(6)
094 (ANT 59)	1,100,000 Gallon No. 2 Bulk AN Internal Floating Roof Tank (FI233TA03-100)	VOC	HON G (Group 1)	335-3-11-.06(6)
046 (ANT 60)	600,000 Gallon No. 4 Bulk AN Internal Floating Roof Tank (FI233TA039-02)	VOC	HON G (Group 1)	335-3-11-.06(6)
Tanks 97 and 98	Two-100,000 Gallon AN/PN Mixture Internal Floating Roof Tanks (FI402TA988 and FI402TA989)	VOC	HON G (Group 1)	335-3-11-.06(6)

ADN Group 1 Tanks
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.	335-3-16-.03
2. These sources are to the requirements of the General Provisions as indicated in 40 CFR Part 63 Subpart A, unless otherwise stated in 40 CFR Part 63, Subparts F and G.	335-3-11-.06(1)
3. These sources are to the requirements of the Hazardous Organic NESHAP, as specified in 40 CFR Part 63, Subparts F and G.	335-3-11-.06(5),(6)
Emission Standards	
1. No. 1 and No. 3 Bulk AN tanks shall operate and maintain an external floating roof as specified in 63.119(a)(1) of the HON:	335-3-11-.06(6)
2. The external floating roofs on No. 1 and No. 3 Bulk AN tanks shall comply with the provisions of 63.119(c) of the HON:	335-3-11-.06(6)
3. No. 2 Bulk AN Tank, No. 4 Bulk AN Tank, Tank 97, and Tank 98 shall operate and maintain a fixed roof and internal floating roof, each as specified in 63.119(a)(1) of the HON.	335-3-11-.06(6)
4. The internal floating roofs on No. 2 Bulk AN Tank, No. 4 Bulk AN Tank, Tank 97, and Tank 98 shall comply with the provisions of 63.119(b) of the HON.	335-3-11-.06(6)
Compliance and Performance Test Methods and Procedures	
1. The maximum true vapor pressure of the materials stored in these tanks shall be determined as specified in 63.111 of the HON.	335-3-11-.06(6)
Emission Monitoring	
1. To demonstrate compliance with the external floating roof reference control technology requirements of the HON, 63.120(b) of Subpart G of the HON shall be followed for the No. 1 and No. 3 Bulk Tanks.	335-3-11-.06(6)
2. According to 63.120(b)(1) of Subpart G of the HON, seal gap tests for the primary seal on the No. 1 and No. 3 Bulk Tanks shall be conducted at least once every five years and seal gap tests for the secondary seal on this tank shall be performed yearly, except as provided under 63.120(b)(7).	335-3-11-.06(6)
3. Each time the No. 1 and No. 3 Bulk Tanks are emptied and degassed, visual inspections of the primary seal, the secondary seal, and the fittings shall be conducted as required by 63.120(b)(10) of the HON.	335-3-11-.06(6)

Federally Enforceable Provisos	Regulations
4. To demonstrate compliance with the internal floating roof reference control technology requirements of the HON, 63.120(a) of Subpart G of the HON shall be followed for No. 2 Bulk AN Tank, No. 4 Bulk AN Tank, Tank 97, and Tank 98.	335-3-11-.06(6)
5. According to 63.120(a)(3) of Subpart G of the HON, inspections of No. 2 Bulk AN Tank, No. 4 Bulk AN Tank, Tank 97, and Tank 98 shall consist of either (a), **or** (b) **and** (c) as noted below: **(a)** visual inspections of the internal floating roof equipment noted in the regulations shall be conducted each time the storage vessels are emptied and degassed and at least once every 5 years **or,** **(b)** visual inspections shall be conducted on the internal floating roofs and secondary seals through the manhole and roof hatches at least once every 12 months **and** **(c)** the internal floating roof equipment noted in the regulations shall be inspected each time the vessels are emptied and degassed and at least once every 10 years	335-3-11-.06(6)
Recordkeeping and Reporting Requirements	
1. As specified in 63.120(b)(9) of the HON, at least 30 calendar days prior to any required seal gap measurements for the No. 1 and No. 3 Bulk Tanks, notification shall be made to the Administrator.	335-3-11-.06(6)
2. As specified in 63.120(a)(5) and 63.120(b)(10)(ii) of the HON, at least 30 calendar days prior to refilling these tanks, notification shall be made to the Administrator, except as provided in 63.120(a)(6) and 63.120(b)(10)(iii).	335-3-11-.06(6)
3. The reporting requirements for these tanks as referenced in 63.122 of the HON shall be followed, as applicable.	335-3-11-.06(6)
4. Periodic Reports as required by 63.152(c) of the HON shall be submitted with the information in 63.122(d) and (e).	335-3-11-.06(6)
5. The recordkeeping provisions of 63.123 of the HON shall be followed, as applicable.	335-3-11-.06(6)
6. As specified in 63.123(a), records showing the dimensions and capacities of these tanks shall be maintained and be readily accessible as long as these tanks are designated as a Group 1 or Group 2 HON Storage Vessel.	335-3-11-.06(6)

ADN Group 1 Tanks
Provisos

Federally Enforceable Provisos	Regulations
7. Records of each required inspection shall be maintained as specified in 63.123(c) of the HON.	335-3-11-.06(6)
8. Records of each required seal gap test shall be maintained as specified in 63.123(d) of the HON.	335-3-11-.06(6)

Boilers 5 & 6
Informational Summary

Description: 290 MMBTU/hr Coal-Fired Boiler with Electrostatic Precipitator and SNCR (Boiler #5) and 320 MMBTU/hr Coal- Fired Boiler with Electrostatic Precipitator and SNCR (Boiler #6)

Emission Unit No: 005, 006

Installation Date: 1964, 1965 **Reconstruction / Modification date**: 2012

Operating Capacity: Boiler #5 – 180 kpph steam; Boiler #6 – 200 kpph steam

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 63 Subpart DDDDD

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
005, 006	Boilers #5, #6	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60 minute period and no 6-minute average opacity of greater than 40%	335-3-4-.01
005	Boiler #5	PM	0.12 lb/MMBTU	335-3-4-.03(1)
005	Boiler #5	PM	34.8 lb/hr	335-3-4-.03(1)
005	Boiler #5	SO_2	4 lb/MMBTU	335-3-5-.01(b)
005	Boiler #5	SO_2	3.9 lb/MMBTU	335-3-14
005	Boiler #5	SO_2	1,131 lbs/hr	335-3-14
005	Boiler #5	SO_2	406 lb/hr (after January 1, 2013)	Part 51, Subpart Y
005	Boiler #5	NO_x	101.22 lb/hr (after January 1, 2013)	Part 51, Subpart Y
006	Boiler #6	PM	0.12 lb/MMBTU	335-3-4-.03(1)
006	Boiler #6	PM	38.4 lb/hr	335-3-4-.03(1)
006	Boiler #6	SO_2	4 lb/MMBTU	335-3-5-.01(b)
006	Boiler #6	SO_2	3.9 lb/MMBTU	335-3-14
006	Boiler #6	SO_2	1,248 lbs/hr	335-3-14
006	Boiler #6	SO_2	448 lb/hr (after January 1, 2013)	Part 51, Subpart Y
006	Boiler #6	NO_x	109.72 lb/hr (after January 1, 2013)	Part 51, Subpart Y

Permitted Fuels

Fuel
Coal

Boilers 5 & 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.	335-3-16-.03
2. These units are subject to the provisions of ADEM Admin. Code R. 335-3-8-.05, "NOx Budget Trading Program".	335-3-8-.05
3. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63 Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	
4. This source is subject to the requirements of the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD.	
Emission Standards	
1. The sulfur dioxide (SO_2) emission rate from Boiler #5 shall not exceed 3.9 lb/MMBTU and 1,131 lb/hr.	335-3-14
2. The sulfur dioxide (SO_2) emission rate from Boiler #6 shall not exceed 3.9 lb/MMBTU and 1,248 lb/hr.	335-3-14
3. The sulfur dioxide (SO_2) emission rate from Boilers #5 and #6 shall each not exceed 4.0 lb/MMBTU.	335-3-5-.01(b)
4. The particulate matter (PM) emission rate from Boiler #5 shall not exceed 0.12 lb/MMBTU and 34.8 lb/hr.	335-3-4-.03(1)
5. The particulate matter (PM) emission rate from Boiler #6 shall not exceed 0.12 lb/MMBTU and 38.4 lb/hr.	335-3-4-.03(1)
6. Boilers #5 and #6 shall each be equipped with electrostatic precipitators.	335-3-14
7. Boilers #5 and #6 shall each be equipped with a continuous opacity meter to indicate compliance with the opacity and particulate standards. The meters shall comply with Performance Specification 1 as listed in Appendix B of 40 CFR Part 60.	335-3-14
8. Boilers #5 and #6 shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period in any sixty minute period of not greater than 40%, unless otherwise exempted by this permit.	335-3-4-.01

Federally Enforceable Provisos	Regulations
9. For Boilers #5 and #6, emissions of plume opacity in excess of the levels otherwise authorized in this permit which occur as determined by the Director as a result of properly performed start-ups, shutdowns or load changes will not be considered violations.	335-3-4-.01(1)(c)
10. The owners and operators of each NOx Budget source and each NOx Budget unit shall hold NO_x allowances available for compliance deductions under Rule 335-3-8-.10(5)(a), (b), (e), or (f), as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Rule 335-3-8-.12, plus any amount necessary to account for excess emissions for a prior control period under Rule 335-3-8-.10(5)(d) or, for a NO_x Budget opt-in source, to account for withdrawal from the NO_x Budget Program under Rule 335-3-8-.13(7), or for a change in regulatory status for a NO_x Budget opt-in source under Rule 335-3-8-.13(8).	335-3-8-.05(6)(c)(1)
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate requirements shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
2. Compliance with SO_2 emission rates shall be determined by Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
3. Compliance with the opacity requirements shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
4. The sulfur content of fuels utilized by this source shall be determined by ASTM D4239. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
5. This source will require a tune-up to be performed in accordance with 40 CFR 63.7515(d).	
Emission Monitoring	
1. As an indicator of compliance with the SO_2 emission limits on Boilers #5 and #6, the SO_2 emissions (lb/MMBTU) from each source shall be calculated from the sulfur content and BTU ratings of the coal burned in these sources. A guaranteed analysis of each shipment of coal shall be obtained from the supplier.	335-3-16-.05(c)(1)(ii)

Federally Enforceable Provisos	Regulations
2. Particulate Matter (PM) and Sulfur Dioxide (SO_2) emission rate tests for Boilers #5 and #6 shall be conducted at intervals not to exceed twelve (12) months.	335-3-14
3. Compliance with the opacity and particulate standards for Boilers #5 and #6 shall be indicated by the continuous opacity monitoring systems (COMS). The procedures found in 40 CFR 60.13 shall be followed for the installation, evaluation, and operation of each COMS.	335-3-16-.05(c)(1)(ii)
4. A continuous nitrogen oxides emissions monitoring system shall be operated, maintained, and certified in accordance with the applicable provisions of ADEM. Admin. Code R. 335-3-8-.12 and 40 CFR Part 75 by no later than May 31, 2004, or prior to operating after that date.	335-3-8-.12
Recordkeeping and Reporting Requirements	
1. Records of excess opacity for each boiler shall be maintained in a permanent form suitable for inspection for a period of at least five years.	335-3-14
2. A written report of excess opacity emissions shall be submitted for Boiler #5 and #6 for each six month period within 60 days following the end of the period. The reports will include the following information:	335-3-14
a) *Opacity:* the magnitude of excess emissions over 20% computed from six-minute averages. *NO_X*: the magnitude of excess emissions over 101.22 lb/hr for boiler 5 and 109.72 lb/hr for boiler 6 computed from 24-hour averages after January 1, 2013. *SO_2*: the magnitude of excess emissions over 3.9 lb/MMBtu and 1,131 lb/hr computed from one-hour averages (406 lb/hr for boiler 5 and 448 lb/hr for boiler 6 computed from 24-hour averages after January 1, 2013) (data recorded during periods of opacity monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).	
b) The date and time of commencement and completion of each time period of excess emissions.	
c) The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measure adopted.	
d) The date and time identifying each period during which the opacity monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.	

Federally Enforceable Provisos	Regulations
e) When no excess emissions have occurred and the opacity monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	
3. Records of the calculated SO_2 emissions in lb/MMBtu for Boilers #5 and #6 shall be maintained in a permanent form suitable for inspection for a period of at least five years. These records shall include the supporting calculations, including the sulfur content and BTU ratings of the coal fired in these units (i.e., fuel certifications).	335-3-16-.05(c)
4. Results of all calibrations and maintenance on the continuous opacity monitors shall be recorded. These records will be required to be kept in a form suitable for inspection for a period of five years.	335-3-14
5. Results of all emissions tests shall be maintained in a permanent form suitable for inspection for a period of at least five years.	335-3-14
6. The recordkeeping and reporting requirements of Rule 335-3-8-.12 shall be followed, as applicable.	335-3-8-.12
BART	
1. Effective January 1, 2013, the sulfur dioxide (SO_2) emission rate from boiler 5 shall not exceed 1.4 lb/MMBtu and 406 lb/hr computed from 24-hour averages as measured in accordance with 40 CFR Part 60, Method 6. Continuous monitoring for indication of compliance with these limits shall continue to be as required in Emission Monitoring Proviso 3.	Part 51, Subpart Y
2. Effective January 1, 2013, the sulfur dioxide (SO_2) emission rate from boiler 6 shall not exceed 1.4 lb/MMBtu and 448 lb/hr computed from 24-hour averages as measured in accordance with 40 CFR Part 60, Method 6. Continuous monitoring for indication of compliance with these limits shall continue to be as required in Emission Monitoring Proviso 3.	Part 51, Subpart Y
3. Effective January 1, 2013, the nitrogen oxide (NO_X) emission rate from these boilers shall not exceed 101.22 lb/hr computed from 24-hour averages.	Part 51, Subpart Y
4. Effective January 1, 2013, the nitrogen oxide (NO_X) emission rate from these boilers shall not exceed 109.72 lb/hr computed from 24-hour averages.	Part 51, Subpart Y
5. Effective January 1, 2013, a continuous NO_X monitoring system shall be used for determination of compliance with the NO_X emission rate as indicated in BART Proviso No. 2. This monitor shall meet the requirements of ADEM Code 335-3-8-.12 and 40 CFR Part 75. The lb/hr NO_X emission rate will be calculated similar to the heat input rate apportionment for units sharing a common stack per Part 75, Appendix F, Section 5.6.	Part 51, Subpart Y

Boilers 5 & 6
Provisos

Federally Enforceable Provisos	Regulations
6. Particulate emissions from boiler 5 shall not exceed 0.12 lbs/MMBtu and 34.8 lb/hr, measured in accordance with 40 CFR Part 60, Method 5.	Part 51, Subpart Y
7. Particulate emissions from boiler 6 shall not exceed 0.12 lbs/MMBtu and 38.4 lb/hr, measured in accordance with 40 CFR Part 60, Method 5.	Part 51, Subpart Y
8. These boilers shall be equipped with an electrostatic precipitator.	Part 51, Subpart Y

Boiler 7
Informational Summary

Description: 536.1 MMBTU/hr Boiler with an Electrostatic Precipitator, baghouse, and SNCR (No. 7 Boiler)

Emission Unit No: 015

Installation Date: 1974 **Reconstruction / Modification date:** 2012

Operating Capacity: 400 kpph steam

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 60 Subpart D **Part 63 Subpart DDDDD**

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
015	Boiler No. 7	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60 minute period and no 6-minute average opacity of greater than 40%.	335-3-4-.01
015	Boiler No. 7	Opacity	Not more than 20% except for one six-minute period per hour of not more than 27%	40 CFR 60.42(a)(2)
015	Boiler No. 7	PM	0.12 lb/MMBTU	335-3-4-.03(1)
015	Boiler No. 7	PM	64.33 lb/hr	335-3-4-.03(1)
015	Boiler No. 7	PM	0.10 lb/MMBTU	40 CFR 60.42(a)(1)
015	Boiler No. 7	SO_2	4 lb/MMBTU	335-3-5-.01(b)
015	Boiler No. 7	SO_2	1.17 lb/MMBTU	335-3-14
015	Boiler No. 7	SO_2	627.2 lbs/hr	335-3-14
015	Boiler No. 7	SO2	0.47 lb/MMBTU after January 1, 2013)	Part 51, Subpart Y
015	Boiler No. 7	SO2	252 lbs/hr after January 1, 2013)	Part 51, Subpart Y
015	Boiler No. 7	SO_2	1.2 lb/MMBTU	40 CFR 60.43(a)(2)
015	Boiler No. 7	NO_x	0.7 lb/MMBTU	40 CFR 60.44(a)(3)
015	Boiler No. 7	NO_x	375.27 lb/hr	335-3-14
015	Boiler No. 7	NO_x	0.36 lb/MMBTU (after January 1, 2013)	Part 51, Subpart Y
015	Boiler No. 7	NO_x	193 lb/hr after January 1, 2013)	Part 51, Subpart Y

Boiler 7
Provisos

Permitted Fuels

Fuel
Coal
No. 2 Fuel Oil (startup only)
PN Vapor
Adiponitrile Flasher Tails (AFT)
Low Boiler Make (LBM)
Bishexamethylenetriamine (BHMT)
Amine Heads

Boiler 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.	335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart D.	335-3-10-.02(1)
3. This source is subject to the requirements of the Federal New Source Performance Standards (NSPS) for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971, Subpart D.	335-3-10-.02(2)
4. This unit is subject to the provisions of ADEM Admin. Code R. 335-3-8-.05, "NOx Budget Trading Program".	335-3-8-.05
5. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63 Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	
6. This source is subject to the requirements of the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD.	
Emission Standards	
1. Boiler #7 shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period in any sixty minute period of not greater than 40%.	335-3-4-.01
2. Boiler #7 shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period per hour of not greater than 27%, in accordance with Subpart D.	335-3-10-.02(2)
3. The particulate matter (PM) emission rate from Boiler #7 shall not exceed 0.12 lb/MMBTU and 64.33 lb/hr.	335-3-4-.03(1)
4. The particulate matter (PM) emission rate from Boiler #7 shall not exceed 0.10 lb/MMBTU in accordance with Subpart D.	335-3-10-.02(2)
5. The sulfur dioxide (SO_2) emission rate from Boiler #7 shall each not exceed 4.0 lb/MMBTU.	335-3-5-.01(b)

Boiler 7
Provisos

Federally Enforceable Provisos	Regulations
6. The sulfur dioxide (SO_2) emission rate from Boiler #7 shall not exceed 1.17 lb/MMBTU and 627.2 lb/hr.	335-3-14
7. The sulfur dioxide (SO_2) emission rate from Boiler #7 shall not exceed 1.2 lb/MMBTU, in accordance with Subpart D.	335-3-10-.02(2)
8. The nitrogen oxides (NO_x) emission rate (expressed as NO_2) from Boiler #7 shall not exceed 0.7 lb/MMBTU, in accordance with Subpart D.	335-3-10-.02(2)
9. The nitrogen oxides (NO_x) emission rate from Boiler #7 shall not exceed 375.27 lb/hr.	335-3-14
10. Boiler #7 may be fueled with Propionitrile (PN) vapor but liquid PN may not be burned.	335-3-14
11. Boiler #7 shall be equipped with an electrostatic precipitator.	335-3-14
12. The owners and operators of each NO_x Budget source and each NO_x Budget unit shall hold NO_x allowances available for compliance deductions under Rule 335-3-8-.10(5)(a), (b), (e), or (f), as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Rule 335-3-8-.12, plus any amount necessary to account for excess emissions for a prior control period under Rule 335-3-8-.10(5)(d) or, for a NO_x Budget opt-in source, to account for withdrawal from the NO_x Budget Program under Rule 335-3-8-.13(7), or for a change in regulatory status for a NO_x Budget opt-in source under Rule 335-3-8-.13(8).	335-3-8-.05(6)(c)(1)
Compliance and Performance Test Methods and Procedures	
1. The emission rate of particulate matter (PM) shall be measured in accordance with Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
2. The emission rate of sulfur dioxide (SO_2) shall be measured in accordance with Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
3. Compliance with the nitrogen oxide (NOx) emission limits shall be determined by the NOx continuous emissions monitoring system required by this permit and NSPS Subpart D or Reference Methods 7 or 7E in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05

Boiler 7
Provisos

Federally Enforceable Provisos	Regulations
4. Compliance with the opacity requirements shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
5. The test methods and procedures of 60.46 of Subpart D shall be followed, as applicable.	335-3-10-.02(2)
6. The sulfur content of fuels utilized by this source shall be determined by ASTM D4239. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
7. This source will require a tune-up to be performed in accordance with 40 CFR 63.7515(d).	
Emission Monitoring	
1. The emission and fuel monitoring requirements of 60.45 of Subpart D shall be followed as applicable.	335-3-10-.02(2)
2. Prior to January 1, 2013, as an indicator of compliance with the SO_2 emission limits for Boiler #7, the SO_2 emissions (lb/MMBTU) shall be calculated from the sulfur content and BTU ratings of the coal burned in this source. A guaranteed analysis of each shipment of coal shall be obtained from the supplier.	335-3-16-.05(c)(1)(ii)
3. Particulate Matter (PM) emission rate tests for Boiler #7 shall be conducted at intervals not to exceed twelve (12) months.	335-3-14
4. Compliance with the opacity and particulate standards for Boiler #7 shall be indicated by the continuous opacity monitoring systems (COMS).	335-3-16-.05(c)(1)(ii); 335-3-10-.02(2)
5. A continuous nitrogen oxides emissions monitoring system shall be operated, maintained, and certified in accordance with the applicable provisions of ADEM. Admin. Code R. 335-3-8-.12 and 40 CFR Part 75 by no later than May 31, 2004, or prior to operating after that date.	335-3-8-.12; 335-3-10-.02(2)
Recordkeeping and Reporting Requirements	
1. Records of excess opacity for each boiler shall be maintained in a permanent form suitable for inspection for a period of at least five years.	335-3-10-.02(2)
2. A written report of excess opacity, NO_X, and SO_2 emissions shall be submitted for Boiler #7 for each six month period within 60 days following the end of the period. The reports will include the following information:	335-3-10-.02(2)
a) (1) *Opacity*: The magnitude of excess emissions over 20% computed from six-minute averages	

Federally Enforceable Provisos	Regulations
(2) *NOx*: the magnitude of excess emissions over 0.7 lb/MMBtu computed from one-hour averages (0.36 lb/MMBtu and 193 lb/hr computed from 24-hour averages after January 1, 2013). (3) *SO_2*: the magnitude of excess emissions over 1.17 lb/MMBtu computed from one-hour averages (0.47 lb/MMBtu and 252 lb/hr computed from 24-hour averages after January 1, 2013).	
b) The date and time of commencement and completion of each time period of excess emissions.	
c) The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measure adopted. d) The date and time identifying each period during which the opacity monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments. e) Equations used to convert SO_2 and NO_X emission data as monitored to be required reporting standard (lb/MMBtu) will be included in the reports. f) When no excess emissions have occurred and the opacity monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	
3. Records of the calculated SO_2 emissions in lb/MMBTU shall be maintained in a permanent form suitable for inspection for a period of at least five years. These records shall include the supporting calculations, including the sulfur content and BTU ratings of the coal fired in these units (i.e., fuel certifications).	335-3-16-.05(c)
4. Results of all calibrations and maintenance on the continuous opacity monitors shall be recorded. These records will be required to be kept in a form suitable for inspection for a period of five years.	335-3-10-.02(2)
5. Results of all emissions tests shall be maintained in a permanent form suitable for inspection for a period of at least five years.	335-3-14; 335-3-10-.02(2)
6. The recordkeeping and reporting requirements of Rule 335-3-8-.12 shall be followed, as applicable.	335-3-8-.12
BART	
1. Effective January 1, 2013, the sulfur dioxide (SO_2) emission rate from this boiler shall not exceed 0.47 lb/MMBtu and 252 lb/hr computed from 24-hr averages as measured with a continuous emission monitoring system.	Part 51, Subpart Y

Boiler 7
Provisos

Federally Enforceable Provisos	Regulations
2. Effective January 1, 2013, this boiler would meet the required limit in BART Proviso No. 1 by installing a sorbent injection system (FSI) or comparable technology.	Part 51, Subpart Y
3. Effective January 1, 2013, the nitrogen oxide (NO_X) emission rate from this boiler shall not exceed 0.36 lb/MMBtu and 193 lb/hr computed from 24-hr averages as measured with a continuous emission monitoring system.	Part 51, Subpart Y
4. Effective January 1, 2013, this boiler would meet the required limit in BART Proviso No. 3 by installing a rotating opposed fired air system (ROFA) or comparable technology.	Part 51, Subpart Y
5. Effective January 1, 2013, this boiler shall be equipped with a SO_2 continuous emissions monitoring system for determination of compliance with the SO_2 emission rate. This monitor shall meet the requirements of 40 CFR Part 60, Appendix F.	Part 51, Subpart Y
6. Effective January 1, 2013, the continuous NO_X monitoring system shall be used for determination of compliance with the NO_X emission rate as indicated in BART Proviso No. 3. This monitor shall meet the requirements of 40 CFR Part 60, Appendix F.	Part 51, Subpart Y
7. Particulate emissions from this source shall not exceed 0.10 lbs/MMBtu.	Part 51, Subpart Y
8. This boiler shall be equipped with an electrostatic precipitator and baghouse.	Part 51, Subpart Y
9. Pressure drop across the baghouse shall be monitored as an indicator of compliance with the particulate limit. A minimum pressure drop will be determined during initial testing and may be changed through subsequent testing.	Part 51, Subpart Y

Cokers No. 1 & 2
Informational Summary

Description: 384 MMBTU/hr Riley Stoker Boiler No. 7 with Research Cottrell ESP Control (Coker No. 1), 384 MMBTU/hr Riley Stoker Boiler No. 8 with Research Cottrell ESP Control (Coker No. 2)

Emission Unit No: 007, 008

Installation Date: 1964, 1964

Reconstruction / Modification date: 2012

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 63 Subpart DDDDD

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
007, 008	Coker Nos. 1 and 2	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60 minute period and no 6-minute average opacity of greater than 40%, unless otherwise allowed	335-3-4-.01
007	Coker No. 1	PM	0.12 lb/MMBTU	335-3-4-.03(1)
007	Coker No. 1	SO_2	4 lb/MMBTU	335-3-5-.01(b)
007	Coker No. 1	SO_2	3.57 lb/MMBTU	335-3-14
007	Coker No. 1	SO_2	1,370.1 lbs/hr	335-3-14
007	Coker No. 1	NO_x	104.43 (after January 1, 2013)	Part 51, Subpart Y
008	Coker No. 2	PM	0.12 lb/MMBTU	335-3-4-.03(1)
008	Coker No. 2	SO_2	4 lb/MMBTU	335-3-5-.01(b)
008	Coker No. 2	SO_2	3.57 lb/MMBTU	335-3-14
008	Coker No. 2	SO_2	1,370.1 lbs/hr	335-3-14
005	Coker No. 2	NO_x	14.43 lb/hr (after January 1, 2013)	Part 51, Subpart Y

Permitted Fuels

Fuel
Coal

Cokers No. 1 & 2
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.	335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63 Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	
3. This source is subject to the requirements of the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD.	
Emission Standards	
1. The sulfur dioxide (SO_2) emission rate from Coker #1 shall not exceed 3.57 lb/MMBTU and 1370.1 lb/hr.	335-3-14
2. The sulfur dioxide (SO_2) emission rate from Coker #2 shall not exceed 3.57 lb/MMBTU and 1370.1 lb/hr.	335-3-14
3. The sulfur dioxide (SO_2) emission rate from Coker Nos. 1 and 2 shall each not exceed 4.0 lb/MMBTU.	335-3-5-.01(b)
4. The particulate matter (PM) emission rate from Coker #1 shall not exceed 0.12 lb/MMBTU.	335-3-4-.03(1)
5. The particulate matter (PM) emission rate from Coker #2 shall not exceed 0.12 lb/MMBTU.	335-3-4-.03(1)
6. Cokers #1 and #2 shall each be equipped with electrostatic precipitators.	335-3-14
7. Cokers #1 and #2 shall be equipped with a continuous opacity meter to indicate compliance with the opacity standard. The meter shall comply with the performance specifications as listed in Appendix B, 40 CFR Part 60.	335-3-14
8. Coker #1 and #2 shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period in any sixty minute period of not greater than 40%, unless otherwise exempted by this permit.	335-3-4-.01

Federally Enforceable Provisos	Regulations
9. For Cokers #1 and #2, emissions of plume opacity in excess of the levels otherwise authorized in this permit which occur as determined by the Director as a result of properly performed start-ups, shutdowns or load changes will not be considered violations.	335-3-4-.01(1)(c)
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate requirements shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
2. Compliance with SO_2 emission rates shall be determined by Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
3. Compliance with the opacity requirements shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
4. The sulfur content of fuels utilized by this source shall be determined by ASTM D4239. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
5. This source will require a tune-up to be performed in accordance with 40 CFR 63.7515(d).	
Emission Monitoring	
1. As an indicator of compliance with the SO_2 emission limits on Coker #1 and Coker #2, the SO_2 emissions (lb/MMBTU) from each source shall be calculated from the sulfur content and BTU ratings of the coal burned in these sources. A guaranteed analysis of each shipment of coal shall be obtained from the supplier.	335-3-16-.05(c)(1)(iii)
2. Compliance with the opacity and particulate standards for Coker #1 and Coker #2 shall be indicated by the continuous opacity monitoring system (COMS). The procedures found in 40 CFR 60.13 shall be followed for the installation, evaluation, and operation of each COMS.	335-3-16-.05(c)(1)(iii)
Recordkeeping and Reporting Requirements	
1. Records of excess opacity for each Coker shall be maintained in a permanent form suitable for inspection for a period of at least five years.	335-3-14
2. A written report of excess opacity emissions shall be submitted for Cokers #1 and #2 for each six month period within 60 days following the end of the period. The reports will include the following information:	335-3-14

Federally Enforceable Provisos	Regulations
a) The magnitude of excess emissions over 20% computed from six-minute averages (data recorded during periods of opacity monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages). b) The date and time of commencement and completion of each time period of excess emissions. c) The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measure adopted. d) The date and time identifying each period during which the opacity monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments. e) When no excess emissions have occurred and the opacity monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	
3. Records of the calculated SO_2 emissions in lb/MMBTU for Coker #1 and Coker #2 shall be maintained in a permanent form suitable for inspection for a period of at least five years. These records shall include the supporting calculations, including the sulfur content and BTU ratings of the coal fired in these units (i.e., fuel certifications).	335-3-16-.05(c)
4. Results of all calibrations and maintenance on continuous monitors shall be recorded. These records will be required to be kept in a form suitable for inspection for a period of five years.	335-3-14
BART	
1. Effective January 1, 2013, the nitrogen oxide (NO_X) emissions from these units shall not exceed 104.43 lb/hr.	Part 51, Subpart Y
2. Particulate emissions from these sources shall not exceed 0.12 lbs/MMBTU.	Part 51, Subpart Y
3. Sulfur dioxide emissions from these sources shall not exceed 3.57 lbs/MMBTU and 1,370.1 lb/hr.	Part 51, Subpart Y
4. These boilers shall be equipped with an electrostatic precipitator.	Part 51, Subpart Y
5. Effective January 1, 2013, the continuous NO_X monitoring system shall be used for determination of compliance with the NO_X emission rate as indicated in BART Proviso No. 1. This monitor shall meet the requirements of 40 CFR Part 60, Appendix F.	Part 51, Subpart Y

Boilerhouse Coke Handling/Loading System and Ash Handling/Storage Informational Summary

Description: Boilerhouse Coke Handling and Loading System with Baghouse and Ash Handling and Storage with Bagfilters and Baghouses

Emission Unit No: 013

Installation Date: **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
1-9 (5 Baghouses, 4 Bagfilters)	Coke Handling and Loading System and Ash Handling and Storage	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60 minute period and no 6-minute average opacity of greater than 40%	335-3-4-.01
1-9 (5 Baghouses, 4 Bagfilters)	Coke Handling and Loading System and Ash Handling and Storage	PM	$E=3.59P^{0.62}$	335-3-4-.04(1)

Boilerhouse Coke Handling/Loading System and Ash Handling/Storage 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.	335-3-16-.03
Emission Standards	
1. These sources shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period in any sixty minute period of not greater than 40%.	335-3-4-.01
2. Particulate emissions in any one hour from these sources shall not exceed: $E = 3.59P0.62$ ($P < 30$ tons/hr) where E = emissions in lb/hr P = process weight per hour in tons/hr	335-3-4-.04(1)
Compliance and Performance Test Methods and Procedures	
1. Compliance with the particulate requirements shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
2. Compliance with the opacity requirements shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
Emission Monitoring	
1. As an indicator of compliance with the particulate and opacity emission limits, daily visual observations of each of the 9 baghouse and bagfilter vents associated with this unit shall be conducted by personnel familiar with Method 9. If visible emissions greater than normal are observed, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation shall be performed in order to verify that emissions are reduced to normal.	335-3-16-.05(c)(1)(ii)
Recordkeeping and Reporting Requirements	
1. Records of the required daily visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If visible emissions greater than normal are observed, the records shall include the date and time of the initial observation, a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.	335-3-16-.05(c)

Boilerhouse Fixed Roof Tank Subject to NSPS, Subpart Kb
Informational Summary

Description: 100,000 Gallon #8 Boiler #2 Fuel Oil Tank

Emission Unit No: 013

Installation Date: 1995 **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

40 CFR 60 Subpart Kb

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
054	100,000 Gallon #8 Boiler #2 Fuel Oil Tank	VOC	Subpart Kb	335-3-10-.02(9)(b)

Boilerhouse Fixed Roof Tank
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.	335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Kb.	335-3-10-.02(1)
3. This source is subject to the Federal New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, as specified in 40 CFR Part 60, Subpart Kb.	335-3-10-.02(9)(b)
Emission Standards	
1. The maximum true vapor pressure of VOLs stored in the No. 8 Boiler #2 Fuel Oil Tank shall be less than 3.5 kPa (0.5 psia), such that only the requirements of 60.116b(a) and (b) of Subpart Kb are applicable.	335-3-10-.02(9)(b)
Compliance and Performance Test Methods and Procedures	
1. The methods and procedures for determining the maximum true vapor pressures of the materials stored in the No. 8 Boiler #2 Fuel Oil Tank shall be in accordance with 60.111b(f) of Subpart Kb.	335-3-10-.02(9)(b)
Emission Monitoring	
N/A	
Recordkeeping and Reporting Requirements	
1. The recordkeeping requirements of 60.116b(a) and (b) shall be followed for this source.	335-3-10-.02(9)(b)
2. Readily accessible records showing the dimensions and an analysis showing the capacity of this storage vessel shall be maintained for the life of the source.	335-3-10-.02(9)(b)

HMD Unit
Informational Summary

Description: Hexamethylenediamine (HMD) Synthesis Unit with Hydrogen Synthesis Units

Emission Unit No: 043, 044

Installation Date: 1964 **Reconstruction / Modification date:** 2012

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Part 60 Subpart VV, NNN

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
HMD 202, 203	Hydrogen Synthesis Reformers B-C	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60 minute period and no 6-minute average opacity of greater than 40%	335-3-4-.01
HMD 202, 203	Hydrogen Synthesis Reformers B-C	PM	$\leq$ 0.31 lb/MMBTU	335-3-4-.03(1)
HMD 202, 203	Hydrogen Synthesis Reformers B-C	SO_2	4 lb/MMBTU	335-3-5-.01(b)
	HMD Unit	VOCs	NSPS, Subpart VV LDAR Program	335-3-10-.02(48)
HMD 206	HMD Refiner #1	VOCs	TRE > 8.0 (NNN)	335-3-10-.02(66)

HMD Unit
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.	335-3-16-.03
2. The NSPS affected sources are 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 VV, or Subpart NNN.	335-3-10-.02(1)
3. The HMD Process Unit is subject to the Federal New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified in 40 CFR Part 60, Subpart VV.	335-3-10-.02(48)
4. The HMD Refiner #1 is subject to the requirements of the Federal New Source Performance Standards (NSPS) for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, as specified in 40 CFR Part 60, Subpart NNN.	335-3-10-.02(66)
Emission Standards	
1. The Standards for the Leak Detection and Repair Program of Subpart VV, as listed in 40 CFR 60.482-1 through 60.483-2, shall be followed, as applicable.	335-3-10-.02(48)
2. The TRE index value of the HMD Refiner #1 shall be maintained at greater than 1.0 without the use of a VOC emission control device as specified in 60.662(c) of NSPS, Subpart NNN.	335-3-10-.02(66)
3. As specified in 60.660(c)(4) of NSPS, Subpart NNN, the TRE index value of the HMD Refiner #1 shall be maintained at greater than 8.0 such that only the requirements of 60.662, 60.664(d), (e), and (f), and 60.665(h) and (l) of Subpart NNN are applicable.	335-3-10-.02(66)
4. The B – C Hydrogen Reformers shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six minute average, except for one 6 minute period in any sixty minute period of not greater than 40%.	335-3-4-.01
5. The particulate matter (PM) emission rate from the B – C Hydrogen Reformers shall each not exceed 0.31 lb/MMBTU.	335-3-4-.03(1)
6. The sulfur dioxide (SO_2) emission rate from the B – C Hydrogen Reformers shall each not exceed 4.0 lb/MMBTU.	335-3-5-.01(b)

HMD Unit
Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. The test methods and procedures for the Subpart VV LDAR program shall be followed as specified in 60.485, as applicable.	335-3-10-.02(48)
2. The test methods and procedures of 60.664(d) – (f) of NSPS, Subpart NNN shall be followed, as applicable.	335-3-10-.02(66)
3. Compliance with the particulate requirements shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
4. Compliance with SO_2 emission rates shall be determined by Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
5. Compliance with the opacity requirements shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	335-3-1-.05
Emission Monitoring	
1. As an indicator of compliance with the opacity and particulate requirements on the B-C Hydrogen Reformers, the flue gas oxygen content shall be maintained between 1.5% and 5.0% when burning fuels other than natural gas, and the flue gas temperature shall not exceed 1093 °C, both based upon 3 hour rolling averages.	335-3-16-.05(c)(1)(iii)
Recordkeeping and Reporting Requirements	
1. The recordkeeping and reporting requirements for the Subpart VV LDAR program shall be followed as indicated in 60.486 and 60.487.	335-3-10-.02(48)
2. Semiannual Subpart VV Reports shall be submitted in accordance with 60.487(c).	335-3-10-.02(48)
3. The reporting and recordkeeping requirements of 60.665(h) and (l) of NSPS, Subpart NNN shall be followed, as applicable.	335-3-10-.02(66)
4. Semi-annual reports of the HMD Refiner #1 TRE recalculations as specified in 60.665(l) shall be submitted.	335-3-10-.02(66)
5. Records of the flue gas oxygen contents and temperatures for the B – C Hydrogen Reformers shall be retained for a period of 5 years.	335-3-16-.05(c)

TAA Unit
Informational Summary

Description: Tetrabutyl Alkyl Amine (TAA) Unit

Emission Unit No: 092

Installation Date: 1964 **Reconstruction / Modification date:**

Operating Capacity:

Operating Schedule: 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
HMD 204	LPD Stack		NA	
Fugitives			NA	

TAA Unit
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.	335-3-16-.03
Emission Standards	
This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	
Compliance and Performance Test Methods and Procedures	
This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	
Emission Monitoring	
This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	
Recordkeeping and Reporting Requirements	
This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	