



MAJOR SOURCE OPERATING PERMIT

Permittee: **INDORAMA VENTURES XYLENES & PTA, LLC**
Facility Name: **DECATUR PLANT**
Facility No.: **712-0002**
Location: **DECATUR, MORGAN COUNTY, ALABAMA**

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

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

Issuance Date: Draft
Effective Date: Draft
Expiration Date: Draft

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General Permit Provisos

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

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<p>(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.</p>	Rule 335-3-16-.05(g)
<p>5. <u>Termination for Cause</u></p> <p>This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.</p>	Rule 335-3-16-.05(h)
<p>6. <u>Property Rights</u></p> <p>The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>	Rule 335-3-16-.05(i)
<p>7. <u>Submission of Information</u></p> <p>The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>	Rule 335-3-16-.05(j)
<p>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></p> <p>No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.</p>	Rule 335-3-16-.05(k)

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<p>9. <u>Certification of Truth, Accuracy, and Completeness:</u></p> <p>Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness except as provided in 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.</p>	<p>Rule 335-3-16-.07(a)</p>
<p>10. <u>Inspection and Entry</u></p> <p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:</p> <ul style="list-style-type: none"> (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. 	<p>Rule 335-3-16-.07(b)</p>
<p>11. <u>Compliance Provisions</u></p> <ul style="list-style-type: none"> (a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. 	<p>Rule 335-3-16-.07(c)</p>

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<p>(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.</p> <p>12. <u>Compliance Certification</u></p> <p>A compliance certification shall be submitted annually by August 10th of each year, unless more frequent periods are specified according to the specific rule governing the source or required by the Department.</p> <p>(a) The compliance certification shall include the following:</p> <ul style="list-style-type: none">(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 period consistent with Rule 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements);(4) Whether compliance has been continuous or intermittent;(5) Such other facts as the Department may require to determine the compliance status of the source; <p>(b) The compliance certification shall be submitted to:</p> <p style="text-align: center;">Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463 and to:</p> <p style="text-align: center;">Air and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303</p>	<p>Rule 335-3-16-.07(e)</p>

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<p>13. <u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <p>(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.</p> <p>(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.</p> <p>(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</p> <p>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	<p>Rule 335-3-16-.13(5)</p>
<p>23. <u>Additional Rules and Regulations</u></p> <p>This permit is issued on the basis of Rules and Regulation 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.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p>15. <u>Equipment Maintenance or Breakdown</u></p> <p>(a) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shutdown shall be reported to the Department at least 24 hours prior to the planned shutdown, unless accompanied by the immediate shutdown</p>	<p>Rule 335-3-1-.07(1),(2)</p>

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<p>of the emission source. Such prior notice shall include, but is not limited to the following:</p> <ul style="list-style-type: none"> (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. <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.</p>	
<p>16. <u>Operation of Capture and Control Devices</u></p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>

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<p>17. <u>Obnoxious Odors</u></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be take upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p>	<p>Rule 335-3-1-.08</p>
<p>18. <u>Fugitive Dust</u></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:</p> <p>(1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; or</p> <p>(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; or</p> <p>(3) By paving; or</p> <p>(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions; or</p> <p>(5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.</p>	<p>Rule 335-3-4-.02</p>
<p>19. <u>Additions and Revisions</u></p> <p>Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.</p>	<p>Rule 335-3-16-.13 and .14</p>

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<p>20. <u>Recordkeeping Requirements</u></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <p>(1) The date, place, and time of all sampling or measurements;</p> <p>(2) The date analyses were performed;</p> <p>(3) The company or entity that performed the analyses</p> <p>(4) The analytical techniques or methods used;</p> <p>(5) The results of all analysis;</p> <p>(6) The operating conditions that existed at the time of sampling or measurement.</p> <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.</p>	<p>335-3-16-.05(c)2.</p>
<p>21. <u>Reporting Requirements</u></p> <p>(a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).</p>	<p>Rule 335-3-16-.05(c)(3)</p>

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<p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working day of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p> <p>22. <u>Emission Testing Requirements</u></p> <p>Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department’s air pollution control rules and regulations.</p> <p>To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:</p> <p>(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.</p> <p>(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).</p> <p>(c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.</p> <p>(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.</p>	<p>Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)</p> <p>Rule 335-3-1-.04</p>

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<p>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. All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	<p>Rule 335-3-1-.04</p>
<p>23. <u>Payment of Emission Fees</u></p> <p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.</p>	<p>Rule 335-1-7-.04</p>
<p>24. <u>Other Reporting and Testing Requirements</u></p> <p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.</p>	<p>Rule 335-3-1-.04(1)</p>
<p>25. <u>Title VI Requirements (Refrigerants)</u></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.</p> <p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.</p>	
<p>The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.</p>	<p>335-3-16-.05(a)</p>

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<p>26. <u>Chemical Accidental Prevention Provisions</u></p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <p>(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.</p> <p>(b) The owner or operator shall submit one of the following:</p> <p>(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,</p> <p>(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.</p>	<p>40 CFR Part 68</p>
<p>27. <u>Display of Permit</u></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by any or all persons who may request to see it.</p>	<p>Rule 335-3-14-.01(1)(d)</p>
<p>28. <u>Circumvention</u></p> <p>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.</p>	<p>Rule 335-3-1-.10</p>

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<p>29. <u>Visible Emissions</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>Rule 335-3-4-.01(1)</p>
<p>30. <u>Fuel-Burning Equipment</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03. Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.</p>	<p>Rule 335-3-4-.03</p> <p>Rule 335-3-5-.01</p>
<p>31. <u>Process Industries – General</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.</p>	<p>Rule 335-3-4-.04</p>
<p>32. <u>Averaging Time for Emission Limits</u></p> <p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.</p>	<p>Rule 335-3-1-.05</p>

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<p>33. <u>Permit Shield</u></p> <p>A permit shield exists under this operating permit in accordance with ADEM Administrative Code R. 335-3-16-.10 in that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in Item 12 of the application's ADEM Form 103 for this permit. Under this shield, it has been determined that requirements listed as non-applicable in this section are not applicable to this source.</p>	Rule 335-3-16-.10
<p>34. <u>Continuous Assurance Monitoring (CAM)</u></p> <p>Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.</p> <p>(a) Operation of Approved Monitoring</p> <p>(1) Commencement of operation. The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).</p> <p>(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.</p>	

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<p>(3) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions</p> <p>(4) Response to excursions or exceedances. (a) Upon detection 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 operations 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.</p>	

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

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<p>(i) Improved preventative maintenance practices.</p> <p>(ii) Process operation changes.</p> <p>(iii) Appropriate improvements to control methods.</p> <p>(iv) Other steps appropriate to correct control performance.</p> <p>(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above).</p> <p>(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p> <p>(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 34(a)(4)(b) above, Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:</p> <p>A. Failed to address the cause of the control device performance problems; or</p> <p>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.</p> <p>(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting, or recordkeeping requirement that may apply under Federal, State, or local law, or any other applicable requirements under the Act.</p> <p>(c) Reporting and Recordkeeping Requirements</p>	

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<p>(1) General reporting requirements</p> <p>A. On an after the date specified in Section 34(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. r. 335-3-16-.05(c)(3).</p> <p>B. A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code r. 335-3-16-.05(c)(3) and the following information, as applicable:</p> <ul style="list-style-type: none"> (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 excursion or exceedances occurring. <p>(2) General recordkeeping requirements.</p>	

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Federally Enforceable Provisos	Regulations
<p>A. The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code r. 335-3-16-.05(c)(2). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 34(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).</p> <p>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.</p> <p>(d) Savings Provisions</p> <p>(1) Nothing in this part shall:</p> <p>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.</p>	

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<p>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.</p> <p>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.</p>	

No. 2 Px Unit Informational Summary

Description: No. 2 Paraxylene (Px) Unit

Emission Unit: 001

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

40 CFR Part 60, Subpart RRR

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
KB-101 (1)	200 MMBtu/hr Reactor Heater	NOx	10.4 lb/hr and 45.6 TPY	335-3-14-.04
KB-101 (1)	200 MMBtu/hr Reactor Heater	NOx	1,752,000 MMBtu/year	335-3-14-.04
KB-102 (2)	125 MMBtu/hr Reboiler	NOx	7.0 lb/hr and 30.7 TPY	335-3-14-.04
KB-102 (2)	125 MMBtu/hr Reboiler	NOx	1,095,000 MMBtu/year	335-3-14-.04
KB-104 (3)	7 MMBtu/hr Reboiler	N/A	N/A	N/A
KB-401 (4)	94.3 MMBtu/hr Furnace	NOx	6.6 lb/hr and 28.9 TPY	335-3-14-.04
KB-401 (4)	94.3 MMBtu/hr Furnace	NOx	826,068 MMBtu/yr	335-3-14-.04
KM-503 (5)	No. 2 Px Flare	HAP	§63.11(b)	335-3-11-.06(6)
(1), (2), (3), (4)	See Above	SO2	4 lb/MMBtu	335-3-5-.01
(1), (2), (3), (4)	See Above	PT	$E = 1.38E^{-0.44}$	335-3-4-.03
N/A	HON Group 1 Process Vents	OHAP	Reduce emissions by 98 weight percent or 20 ppmv, whichever is less stringent.	335-3-11-.06(6)
	No. 2 Px Unit	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
	No. 2 Px Unit	HAP	HON, Subpart H LDAR Program	335-3-11-.06(7)
(1), (2), (3), (4)	See Above	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)

No. 2 Px 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.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Control of Particulate Emissions: Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions: Fuel Burning Equipment.	ADEM Admin. Code r. 335-3-4-.04
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions: Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
5. The No. 2 Px hydrotreater reactor is subject to the requirements of 40 CFR Part 60, Subpart RRR, New Source Performance Standards for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry Reactor Processes. As stated in 40 CFR 63.110(d)(7), compliance with the overlapping requirements of Subpart RRR are determined by compliance with 40 CFR Part 63, Subpart G.	ADEM Admin. Code r. 335-3-10-.02(70)
6. 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 RRR.	ADEM Admin. Code r. 335-3-10-.02(1)
7. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, National Emission Standards for Hazardous Organic Pollutants From Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5),(6),& (7)
8. This source is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (“Boiler MACT”).	ADEM Admin. Code r. 335-3-11-.06(107)

No. 2 Px Unit Provisos

Federally Enforceable Provisos	Regulations
9. 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 or 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(1)
10. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. The Px flare (KM-503) shall meet the applicable requirements of §63.11(b).	ADEM Admin. Code r. 335-3-11-.06(6)
3. Total organic HAP emissions from No. 2 Px hydrotreater and associated recovery device(s), classified as a HON Group 1 process vent (TRE less than 1.0), shall be reduced by 98 weight percent or to a concentration of 20 ppmv on a dry basis corrected to 3-percent oxygen, whichever is less stringent as specified in §63.113(a)(2).	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)
4. Emissions from HON Group 1 process vents shall be routed to the fuel gas system, such that the requirements for additional monitoring and to install a flow meter as indicated in §63.114(a)(3) would not be applicable.	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)
5. The HON wastewater stream(s) in this unit have been classified as Group 2 existing sources and as such are only subject to the recordkeeping and reporting requirements listed in §§63.146(b)(1) and 63.147(b)(8) as indicated in §63.132(b)(3).	ADEM Admin. Code r. 335-3-11-.06(6)
6. A tune-up shall be performed on the KB-101, KB-102, KB-104, and KB-401 process heaters at the frequency specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.02(107)

No. 2 Px Unit Provisos

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<p>7. Emissions of particulate matter from each of the combustion sources within this unit in any one hour shall not exceed the amount determined by use of the following equation:</p> $E = 1.38H^{-0.44}$ <p>Where, E = Emissions in pound per MMBtu heat input H = Heat input in MMBtu/hr</p>	ADEM Admin. Code r. 335-3-4-.03
8. The sulfur dioxide (SO ₂) emissions from the fuel burning equipment sources shall not exceed 4 lb/MMBtu of heat input per source.	ADEM Admin. Code r. 335-3-5-.01
9. The KB-101, KB-102, KB-104, and KB-401 process heaters shall be limited to firing natural gas, paraxylene gas, and anaerobic gas.	ADEM Admin. Code r. 335-3-14-.04
10. NO _x emissions from the KB-101 heater shall not exceed 10.4 lb/hr and 45.6 TPY based on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
11. In order to ensure compliance with the NO _x emissions limitations, the maximum firing rate of the KB-101 heater shall not exceed 1,752,000 MMBtu/year, as calculated on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
12. NO _x emissions from the KB-102 heater shall not exceed 7.0 lb/hr and 30.7 TPY based on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
13. In order to ensure compliance with the NO _x emissions limitations, the maximum firing rate of the KB-102 heater shall not exceed 1,095,000 MMBtu/year, as calculated on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
14. NO _x emissions from the KB-401 heater shall not exceed 6.6 lb/hr and 28.9 TPY based on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
15. In order to ensure compliance with the NO _x emissions limitations, the maximum firing rate of the KB-401 heater shall not exceed 826,068 MMBtu/year, as calculated on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04

No. 2 Px Unit Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements for the combustion sources in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the opacity requirement for the flare shall be determined by Reference Method 22 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the opacity and particulate matter (PM) emission rate from the process heaters shall be indicated by limiting the type of fuel fired in the source.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the nitrogen oxides (NO _x) emission rate shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the nitrogen oxides (NO _x) emission rate from the process heaters shall be indicated by limiting the capacity and type of fuel fired in the source.	ADEM Admin. Code r. 335-3-1-.05
7. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
8. Compliance with the sulfur dioxide (SO ₂) emission rate shall be indicated by limiting the type of fuel fired in this source.	ADEM Admin. Code r. 335-3-1-.05
9. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

No. 2 Px Unit Provisos

Federally Enforceable Provisos	Regulations
10. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
11. The test methods and procedures for 40 CFR Part 60, Subpart RRR, as listed in §60.704 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(70)
12. The methods and procedures for process vent determination as listed in §63.115 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
13. The test methods and procedures to determine compliance for process vents as listed in §63.116 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
14. The test methods and procedures of §63.7520 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Monitoring	
1. The Px flare (KM-503) shall be equipped with a device capable of continuously detecting the presence of a pilot flame as stated in §63.114(a)(3).	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)
2. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart H.	ADEM Admin. Code r. 335-3-11-.06(7)
3. As an indicator of compliance with the capacity limitations of the process heater KB-101, KB-102, and KB-401, the total heat input of the fuel fired in each source shall be monitored. The heat inputs for each source shall be calculated as a monthly average and summed over a 12-month rolling period.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. A periodic report addressing the criteria listed in §63.152(c) shall be submitted semiannually (every 6 calendar months) no later than 60 calendar days after the end of each 6-month period as stated in §63.152(a)(4) in 40 CFR Part 63, Subpart G.	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)

No. 2 Px Unit Provisos

Federally Enforceable Provisos	Regulations
2. The recordkeeping requirements of §63.118, §63.147, and §63.152 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)
3. A periodic report addressing the criteria listed in §63.7550(c)(5)(i) through (iii), (xiv) and (xvii) shall be submitted as stated in §63.7550(c)(1) of 40 CFR Part 63, Subpart DDDDD. The report shall be submitted in accordance with the schedule stated in §63.7550(b), as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
4. As indicated in §63.118(a), hourly records of the presence of a pilot flame on the Px flare and records of pilot flame outages shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-10-.02(70) 335-3-11-.06(6)
5. Records of the heat input to the KB-101, KB-102, and KB-401 process heaters as calculated based on a 12-month rolling total shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

No. 3 Oxidation Unit Informational Summary

Description: No. 3 Terephthalic Acid Oxidation (Ox) Unit

Emission Unit: 002

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

40 CFR Part 60, Subpart III
40 CFR Part 60, Subpart NNN

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
FT-407 (1)	Catalytic Oxidizer (CatOx) Scrubber	N/A	N/A	N/A
FT-603 (2)	Low Pressure Absorber (LPA)	VOC	101.2 tons/12 months	335-3-14-.04
FT-741 (3)	Tower Bottoms Wastewater	VOC	30.7 tons/12 months	335-3-14-.04
FT-741 (3)	Tower Bottoms Wastewater	HAP	Maintain as a Group 2 wastewater stream in accordance with §63.132(c)	335-3-11-.06(6)
FT-741 (3)	Azeotropic Distillation Tower Fugitives	VOC	HON, Subpart H LDAR Program	335-3-14-.04
FT504 (4)	Storage Silo Scrubber	PT	6.8 lb/hr	335-3-14-.04
FB-405 (5)	Catalytic Oxidizer (CatOx) Heater	PT	$E=1.38H^{-0.44}$	335-3-4-.03
FB-405 (5)	Catalytic Oxidizer (CatOx) Heater	PT	0.16 lb/hr	335-3-14-.04
FB-405 (5)	Catalytic Oxidizer (CatOx) Heater	NOx	0.034 lb/MMBtu and 0.67 lb/hr	335-3-14-.04
FB-405 (5)	Catalytic Oxidizer (CatOx) Heater	SO2	4 lb/MMBtu	335-3-5-.01
FB-405 (5)	Catalytic Oxidizer (CatOx) Heater	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)
FT-403 (6)	High Pressure Absorber (HPA)	Bypass Time	280 hours/12 months	335-3-14-.04
FT-741 (3)	NNN Group 2 Distillation Unit	VOC	Maintain a TRE > 1.0 in order to remain classified as a Group 2 distillation unit	335-3-10-.02(66)

No. 3 Oxidation Unit Informational Summary

Emission Point	Point Description	Pollutant	Emission Limit	Standard
FT-403 (6)	III Group 2 Oxidation Process	VOC	Maintain a TRE > 1.0 in order to remain classified as a Group 2 air oxidation process vent	335-3-10-.02(61)
FT-603 (2) FT-403 (6)	HON Group 2 Process Vents	HAP/Halides	Maintain a TRE > 1.0 in order to remain classified as Group 2 process vents	335-3-11-.06(6)
	No. 3 Oxidization Unit Wastewater Streams	HAP	Maintain as HON Group 2 wastewater streams	335-3-33-.06(6)
	No. 3 Oxidation Unit Fugitives	HAP	HON, Subpart H LDAR Program	335-3-11-.06(6)
	No. 3 Oxidation Unit	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	335-3-4-.01
	No. 3 Oxidation Unit	PT	$E=13.15P^{0.16}$	335-3-4-.12
	No. 3 Oxidation Unit	VOC	8248.3 TPY total VOC emissions from the No. 3, No. 4, and No. 5 Ox units combined calculated on a 12 month basis	335-3-14-.04

No. 3 Oxidation 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.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
4. This source is subject to the requirements of the Hazardous Organic NESHAP (HON), as specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
5. The catalytic oxidizer (CatOx) heater (FB-405R) is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, Standards of Performance for Industrial, Commercial, and Institutional Boilers and Process Heaters.	ADEM Admin. Code r. 335-3-11-.06(107)
6. This source is subject to the requirements of 40 CFR Part 60, Subpart III, Standards of Performance for VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes. Compliance with this Subpart is determined by the overlap requirements of 40 CFR Part 63, Subpart G, as listed in §63.110(d)(1)-(3) or (d)(10).	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
7. The azeotropic distillation unit is subject to the requirements of 40 CFR Part 60, Subpart NNN, Standards of Performance for VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Distillation Operations. Compliance with this Subpart is determined by the overlap requirements of 40 CFR Part 63, Subpart G, as listed in §63.110(d)(4)-(6) or (d)(10).	ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)
8. This source is subject to the requirements of 40 CFR Part 60, Subpart A, the General Provisions unless otherwise noted in Subparts III and/or NNN.	ADEM Admin. Code r. 335-3-10-.02(1)

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
9. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions, unless otherwise specified in 40 CFR Part 63, Subpart F, G, and H and/or Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(1)
10. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter from this source shall not exceed the amount determined by the use of the following equation:	ADEM Admin. Code r. 335-3-4-.12
$E=13.15P^{0.16}$	
Where,	
E= Emission in pounds per hour (lb/hr)	
P= Process weight in tons per hour (TPH) for sources greater than 30 TPH (P ≥ 30 TPH).	
3. Emissions of particulate matter from catalytic oxidizer (CatOx) heater (FB-405R) in any one hour shall not exceed the amount determined by use of the following equation:	ADEM Admin. Code r. 335-3-4-.03
$E = 1.38H^{-0.44}$	
Where,	
E = Emissions in pound per MMBtu heat input	
H = Heat input in MMBtu/hr	

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
4. In order to be classified as a Group 2 process vent as calculated by the procedures in 40 CFR Part 63, Subpart G (“HON”), the TRE value of the applicable process vents shall be maintained at greater than 1.0 as specified in §63.113(a)(3).	ADEM Admin. Code r. 335-3-11-.06(6)
5. The applicable requirements of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G (“HON”) for the azeotropic distillation column and associated recovery device(s) for which the distillation column vents (low pressure absorber) shall be determined as specified in the overlap requirements of the HON stated in §63.110(d)(5) for Group 2 process vents.	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
6. The applicable requirements of 40 CFR Part 60, Subpart III and 40 CFR Part 63, Subpart G (“HON”) for the air oxidation reactor and associated recovery device(s) for which the reactor vents (high pressure absorber) shall be determined as specified in the overlap requirements of the HON stated in §63.110(d)(2) for Group 2 process vents.	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
7. The HON wastewater stream(s) in this unit shall be maintained such that the stream(s) are classified as Group 2 existing sources and are only subject to the recordkeeping and reporting requirements listed in §§63.146(b)(1) and 63.147(b)(8) as indicated in §63.132(a)(3).	ADEM Admin. Code r. 335-3-11-.06(6)
8. A tune-up shall be performed on the catalytic oxidizer (CatOx) heater (FB-405R) at the frequency specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
9. Nitrogen oxide (NO _x) emissions from the catalytic oxidizer (CatOx) heater (FB-405R) shall not exceed 0.034 lb/MMBtu and 0.67 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
10. Sulfur dioxide (SO ₂) emissions from the catalytic oxidizer (CatOx) heater (FB-405R) shall not exceed 4 lb/MMBtu based on a 3-hour average.	ADEM Admin. Code r. 335-3-5-.01
11. Volatile organic compound (VOC) emissions from the Nos. 3, 4, and 5 Oxidation units combined shall not exceed 8,248 tons calculated based on consecutive 12 month periods as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
12. VOC emissions from the Low Pressure Absorber (FT-603) shall not exceed 101.2 tons based on consecutive 12 month periods as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
13. VOC emissions from the azeotropic distillation column bottoms wastewater (FT-741) shall not exceed 30.7 tons based on 12 consecutive month periods as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
14. Particulate matter (PM10) from the storage silos scrubber (FT-504) shall not exceed 6.8 lb/hr calculated based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
15. In order to avoid PSD review, a leak detection and repair (LDAR) program shall be implemented for all fugitive components associated with the azeotropic distillation project which are in VOC service. The LDAR program shall follow the procedures and reporting requirements listed in 40 CFR 63, Subpart H of the HON. For the purposes of this LDAR program, "in VOC service" shall mean that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5% VOC by weight.	ADEM Admin. Code r. 335-3-14-.04
16. The high pressure absorber (HPA) shall be limited to bypass vent time of 280 hours based on a 12-month rolling total.	ADEM Admin. Code r. 335-3-14-.04
17. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H shall be met for all applicable equipment in HAP service.	ADEM Admin. Code r. 335-3-11-.06(7)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the particulate matter (PM) and opacity emission rate for combustion sources shall be indicated by limiting the type of fuel fired in this source.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the particulate matter (PM10) and opacity emission rate for the storage silo scrubber (FT-504) shall be indicated by a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the sulfur dioxide (SO ₂) emission rate for the combustion source(s) shall be determined by Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the sulfur dioxide (SO ₂) emission rate for the combustion source(s) shall be indicated by limiting the type of fuel fired in this source.	ADEM Admin. Code r. 335-3-1-.05
7. Compliance with the nitrogen oxides (NO _x) emission rate of this unit shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
8. Compliance with the nitrogen oxides (NO _x) emission rate for combustion sources in this unit shall be indicated by limiting the type of fuel fired in this source.	ADEM Admin. Code r. 335-3-1-.05
9. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
10. Compliance with the volatile organic compound (VOC) emission rate for the low pressure absorber (FT-603), high pressure absorber(FT-403), and azeotropic bottoms tower wastewater (FT-741) shall be indicated by conducting sampling and performing calculations of annual VOC emissions as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-1-.05
11. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
12. The test methods and procedures for group determinations as listed in 40 CFR 60.614(e) – (g) of Subpart III shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(61)
13. The test methods and procedures for group determinations as listed in 40 CFR 60.664(d) – (f) of Subpart NNN shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(66)
14. The test methods and procedures for determining process vent group determinations as listed in §§63.115 and 63.116 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
15. The test methods and procedures for determining wastewater applicability, group determinations, and compliance as specified in §§63.144 and 63.145 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
16. The test methods and procedures for the leak detection and repair (LDAR) program as listed in §63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
17. The methods and procedures for the work practice standards listed in §63.7540 of Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
<p>1. Should the TRE of the Group 2 process vents as calculated in accordance with 40 CFR Part 63, Subpart G (“HON”) be greater than 1.0 but less than or equal to 4.0, the monitoring requirements as specified in §63.114(b) or (c) shall be met, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>
<p>2. The requirements of the leak detection and repair (LDAR) program of the HON as listed in §§63.162 – 63.180 shall be followed for all applicable equipment in organic HAP service as the term is defined in §63.161, as applicable. For the anti-PSD VOC LDAR program associated with the azeotropic distillation column (FT-741), “in VOC service” shall mean that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5% VOC by weight.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(7) 335-3-14-.04</p>
<p>3. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, sampling and testing shall be conducted on the No. 3 high pressure absorber (FT-403) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emission monitoring plan. Calculation methods as indicated in the emission monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>4. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, sampling and testing shall be conducted on the No. 3 low pressure absorber (FT-603) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>5. As a determiner of compliance with the 8,248 TPY VOC limit on the Nos. 3-5 Oxidation units, weekly sampling and testing shall be conducted on the No. 3 Oxidation Unit azeotropic distillation tower bottoms wastewater (FT-741) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>6. The calculated 12-month rolling VOC emissions totals for the No. 3 low pressure absorber (FT-603), high pressure absorber (FT-403), azeotropic distillation column bottoms (FT-741), and the No. 3 Oxidation unit shall be determined by summing the VOC emissions as specified in the most recent VOC emissions monitoring plan.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>7. As an indicator of compliance with the particulate matter (PM10) and opacity requirements on the storage silos scrubber (FT-504), the daily average reflux rate of the scrubber shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>Recordkeeping and Reporting Requirements</p>	
<p>1. As indicated in §63.110(d)(2)(i) and (d)(2)(ii), the recordkeeping and reporting requirements associated with the applicability determination, process changes, and TRE recalculations of 40 CFR Part 60, Subpart III shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)</p>
<p>2. As indicated in §63.110(d)(5), the recordkeeping and reporting requirements associated it the applicability determination, process changes, and TRE recalculations of 40 CFR Part 60, Subpart NNN shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)</p>

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
3. Should the TRE of the HON Group 2 process vents be greater than 1.0 but less than or equal to 4.0, the reporting and recordkeeping requirements of §§63.117 and 63.118 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
4. Should the TRE of the HON Group 2 process vents be greater than 4.0, the reporting and recordkeeping requirements of §§63.117(b) and 63.118(c) and (h) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
5. Semiannual Periodic Reports shall be submitted according to §§63.118(f) and 63.152 of Subpart G of the HON.	ADEM Admin. Code r. 335-3-11-.06(6)
6. All recordkeeping and reporting requirements found in §63.152 of Subpart G the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
7. The recordkeeping and reporting requirements in §§63.181 and 63.182 of Subpart H of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
8. The reporting and recordkeeping requirements for the HON wastewater streams shall be followed as specified in §§63.146 and 63.147, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
9. A periodic report addressing the criteria listed in §63.7550(c)(5)(i) through (iii), (xiv) and (xvii) shall be submitted as stated in §63.7550(c)(1) of 40 CFR Part 63, Subpart DDDDD. The report shall be submitted in accordance with the schedule stated in §63.7550(b), as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
10. Records of the bypass time for the high pressure absorber (FT-403) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
11. Records of the daily average reflux for the storage silo scrubber (FT-504) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
12. Records of the lb VOC emissions/day utilized to calculate the VOC emissions on a monthly basis for each unit shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>13. Reports of the VOC emissions from the Nos. 3 – 5 Oxidation Units, generated from the required sampling procedures, shall be submitted within 30 days of the end of every calendar year quarter. For each month during the quarter, the report shall include:</p> <ul style="list-style-type: none"> • the monthly VOC emissions from each unit • a rolling 12 month VOC emissions total for each unit • a rolling 12 month VOC emissions total for all units • the monthly VOC emissions from the No. 3 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit low pressure absorber. • the monthly VOC emissions from the No. 3 Oxidation Unit FT-741 Bottoms wastewater • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit FT-741 Bottoms wastewater • the monthly VOC emissions from the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) • a rolling 12 month VOC emissions total for the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) • the monthly VOC emissions from the No. 4 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 4 Oxidation Unit CatOx scrubber • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit CatOx Scrubber 	<p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 3 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none">• the monthly VOC emissions from the No. 5 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 5 Oxidation Unit CatOx Scrubber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit CatOx Scrubber	

No. 3 PTA Unit Provisos

Description: No. 3 Purified Terephthalic Acid (PTA) Unit

Emission Unit: 003

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

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Crystallizer Scrubber	VOC	40 lb/hr	335-3-14-.04
(1), (2), (3)	Crystallizer Scrubber, Feed Slurry Drum, and Dryer Vent Scrubber	PT	4.1 lb/hr total	335-3-14-.04
(4)	Silo Dust Collectors: <ul style="list-style-type: none"> • GH-601A-D (4) • GH-701A-H (8) 	PT	5.7 lb/hr total	335-3-14-.04
	No. 3 PTA Unit	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
	No. 3 PTA Unit	PT	$E = 17.31P^{0.16}$	335-3-4-.04

No. 3 PTA 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.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of 40 CFR part 63, Subpart F, G, and H, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
4. This source is subject to the General Provisions as listed in 40 CFR part 63, Subpart A, unless otherwise noted in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
5. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. The particulate emissions from this source shall not exceed the amount based on the following equation:	ADEM Admin. Code r. 335-3-4-.04
$E = 17.31P^{0.16}$	
Where,	
E = Emissions in pounds per hour (lb/hr)	
P = Process weight in tons per hour (TPH) (P ≥ 30 TPH)	

No. 3 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
3. The total particulate matter (PM) emissions from the crystallization scrubber, the feed slurry drum scrubber, and the dryer vent scrubber combined shall not exceed 4.1 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
4. The total particulate matter (PM) emissions from the silo dust collectors (GH-601A-D (4) and GH701A-H (8)) in this unit combined shall not exceed 5.7 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
5. The volatile organic compound (VOC) emissions from the crystallization scrubber shall not exceed 40 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60 (latest edition). Alternate test methods may be approved provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the opacity and particulate matter (PM) emission rate for the storage silos shall be indicated by performing periodic visual inspections of the source.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the opacity and particulate matter (PM) emission rate for the crystallizer, feed slurry drum, and dryer vent scrubbers shall be indicated by the use of a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

No. 3 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
Emission Monitoring	
<p>1. As an indicator of compliance with the particulate matter (PM) and opacity emission limits for the silo baghouses (12), weekly visual observations of the silo baghouses 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 action(s) within 4 hours. After any corrective action(s), an additional observation shall be performed in order to verify that emissions are reduced to normal.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
<p>2. As an indicator of compliance with the particulate matter (PM) and opacity emission limits for the crystallization scrubber, the daily average scrubber flow rate shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
<p>3. As an indicator of compliance with the particulate matter (PM) and opacity emission limits for the feed slurry drum scrubber, the daily average scrubber flow shall be maintained at greater than or equal to 20 gpm.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
<p>4. As an indicator of compliance with the particulate matter (PM) and opacity limits for the dryer vent scrubber, the daily average total scrubber flow (de-ionized water and process water) shall be maintained at greater than or equal to 100 gpm.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
Recordkeeping and Reporting Requirements	
<p>1. Records of the required visual inspections shall be maintained and should be readily available for inspection for a period of five (5) 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 action(s) taken, and the results of the follow-up inspection.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>2. Records of the daily average scrubber flows for the crystallization scrubber, the feed slurry drum scrubber, and the dryer vent scrubber shall be maintained and should be readily available for inspection for a period of five (5) years.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 4 Oxidation Unit Informational Summary

Description: No. 4 Terephthalic Acid Oxidation (Ox) Unit

Emission Unit: 004

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

40 CFR Part 60, Subpart VVa

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

40 CFR Part 60, Subpart NNN

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1) HT-603	Low Pressure Absorber	VOC	103 tons/12 months	335-3-14-.04
(2) HC-757	Blower Vent	Bypass Time	1,000 hours/12 months	335-3-14-.04
(3) HT-504	Silo Scrubber	PM	8.00 lb/hr	335-3-14-.04
(4) HT-403	High Pressure Absorber	Bypass Time	360 hour/12 months	335-3-14-.04
(5) HT-2407	Catalytic Oxidizer (CatOx) Scrubber	VOC	26 tons/12 months	335-3-14-.04
(5) HT-2407	Catalytic Oxidizer (CatOx) Scrubber	CO	210 tons/12 months	335-3-14-.04
(6) HT-741	Azeotropic Distillation Column Bottoms	VOC	70 tons/12 months	335-3-14-.04
(6) HT-741	Azeotropic Distillation Column Bottoms	HAP	Maintain as a Group 2 wastewater stream in accordance with §63.132(c)	335-3-11-.06(6)
(6) HT-741	NNN Group 2 Distillation Unit	VOC	Maintain a TRE > 1.0 in order to remain classified as a Group 2 distillation unit	335-3-10-.02(66)
(1) HT-603 (2) HC-757 (4) HT-403	HON Group 2 Process Vents	HAP/Halides	Maintain a TRE > 1.0 in order to remain classified as Group 2 process vents	335-3-11-.06(6)
	No. 4 Oxidation Unit Wastewater Streams	HAP	Maintain as HON Group 2 wastewater streams	335-3-11-.06(6)
	No. 4 Oxidation Unit Fugitives	HAP	HON, Subpart H LDAR Program	335-3-11-.06(6)

No. 4 Oxidation Unit Informational Summary

Emission Point	Point Description	Pollutant	Emission Limit	Standard
	No. 4 Oxidation Unit	VOC	Subpart VVa LDAR program	335-3-10-.02(48)(a)
	No. 4 Oxidation Unit	Opacity	Not more than one 6-minute average opacity greater than 20% in any 6-minute period and no 6-minute average opacity greater than 40%	335-3-4-.01
	No. 4 Oxidation Unit	PT	$E=13.15P^{0.16}$	335-3-4-.12
	No. 4 Oxidation Unit	VOC	8248.3 TPY total VOC emissions from the No. 3, No. 4, and No. 5 Ox units combined calculated on a 12-month basis	335-3-14-.04

No. 4 Oxidation 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".	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, "Visible Emissions".	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of the Hazardous Organic NESHAP (HON), as specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
4. This source is subject to the requirements of 40 CFR Part 60, Subpart VVa, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006". Compliance with this Subpart is determined by compliance with 40 CFR Part 63, Subpart H, as stated in §60.480a(e)(2)	ADEM Admin. Code r. 335-3-10-.02(48)(a) 335-3-11-.06(7)
5. The azeotropic distillation unit is subject to the requirements of 40 CFR Part 60, Subpart NNN, Standards of Performance for VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Distillation Operations. Compliance with this Subpart is determined by the overlap requirements of 40 CFR Part 63, Subpart G, as listed in §63.110(d)(4)-(6) or (d)(10).	ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)
6. This source is subject to the requirements of 40 CFR Part 60, Subpart A, the General Provisions unless otherwise noted in Subpart NNN.	ADEM Admin. Code r. 335-3-10-.02(1)
7. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions, unless otherwise specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
8. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
9. This source is subject to the reporting requirements of ADEM Admin. Code r. 335-3-14-.04(17)(e) for fine particulate matter (PM _{2.5}).	ADEM Admin. Code r. 335-3-14-.04

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>Emission Standards</p> <p>1. 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%.</p> <p>2. Emissions of particulate matter from this source shall not exceed the amount determined by the use of the following equation:</p> $E=13.15P^{0.16}$ <p>Where,</p> <p>E= Emission in pounds per hour (lb/hr) P= Process weight in tons per hour (TPH) for sources greater than 30 TPH (P ≥ 30 TPH).</p> <p>3. In order to remain classified as a Group 2 process vent as calculated by the procedures in 40 CFR Part 63, Subpart G (“HON”), the TRE value of the applicable process vents shall be maintained at greater than 1.0 as specified in §63.113(a)(3).</p> <p>4. The applicable requirements of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G (“HON”) for the azeotropic distillation column and associated recovery device(s) for which the distillation column vents (low pressure absorber) shall be determined as specified in the overlap requirements of the HON state in 63.110(d)(5) for Group 2 process vents.</p> <p>5. The HON wastewater stream(s) in this unit shall be maintained such that the streams are classified as Group 2 existing sources and as such are only subject to the applicable recordkeeping and reporting requirements listed in §§63.146(b)(1) and 63.147(b)(8) as indicated in §63.132(a)(3).</p> <p>6. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H shall be met for all applicable equipment.</p>	<p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-4-.12</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(7)</p>

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
7. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 60, Subpart VVa shall be met for all applicable equipment.	ADEM Admin. Code r. 335-3-10-.02(48)(a)
8. The carbon monoxide (CO) emissions from the catalytic oxidizer (CatOx) shall not exceed 210 TPY in any consecutive 12 month period.	ADEM Admin. Code r. 335-3-14-.04
9. The volatile organic compound (VOC) emissions from the catalytic oxidizer (CatOx) scrubber (HT-2407) shall not exceed 26 TPY in any 12 consecutive month period as measured and recorded in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
10. The high pressure absorber (HT-403) shall be limited to bypass vent time of 360 hours in any consecutive 12 month period.	ADEM Admin. Code r. 335-3-14-.04
11. The blower vent (HC-757) shall be limited to bypass vent time of 1000 hours per year in any consecutive 12 month period.	ADEM Admin. Code r. 335-3-14-.04
12. The particulate (PM2.5/PM10) emissions from the No. 4 Oxidation silo scrubber (HT-504) shall not exceed 8.00 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
13. The volatile organic compound (VOC) emissions from the low pressure absorber (HT-603) shall not exceed 103 TPY in any 12 consecutive month period as measured and recorded in the most recent monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
14. The volatile organic compound (VOC) emissions from the azeotropic distillation tower bottoms (HT-741) shall not exceed 70 TPY in any 12 consecutive month period as measured and recorded in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
15. Volatile organic compound (VOC) emissions from the Nos. 3, 4, and 5 Oxidation units combined shall not exceed 8,248 tons calculated based on consecutive 12 month periods as measured and approved in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the particulate matter (PM/PM2.5/PM10) and opacity emission rate for the storage silo scrubber shall be indicated by a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the carbon monoxide (CO) emission rate in this unit shall be determined by Reference Method 10 or 10B in Appendix A of 40 CFR Part 60. Alternate test methods may be may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the carbon monoxide (CO) emission rate on the catalytic oxidizer (CatOx) system shall be indicated by a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
7. Compliance with the volatile organic compound (VOC) emission rate for the low pressure absorber (HT-603) and azeotropic distillation column wastewater (HT-471) shall be indicated by conducting sampling and performing calculations of annual VOC emissions as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-1-.05

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
8. Compliance with the volatile organic compound (VOC) emission rate for the catalytic oxidizer (CatOx) scrubber shall be indicated by performing sampling of the high pressure absorber (HT-403) and performing calculations of annual VOC emissions as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-1-.05
9. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
10. The test methods and procedures for group determinations as listed in 40 CFR 60.664(d) – (f) of Subpart NNN shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(66)
11. The test methods and procedures for process vent group determinations as listed in §§63.115 and 63.116 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
12. The test methods and procedures for determining wastewater applicability, group determinations, and compliance as specified in §63.144 and 63.145 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
13. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
14. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 60.485a of Subpart VVa shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(48)a
Emission Monitoring	
1. Should the TRE of the Group 2 process vents as calculated in accordance with 40 CFR Part 63, Subpart G (“HON”) be greater than 1.0 but less than or equal to 4.0, the monitoring requirements as specified in §63.114(b) or (c) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>2. The requirements of the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H, as listed in §63.162 – 63.180 shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(7)</p>
<p>3. The requirements of the leak detection and repair (LDAR) program of 40 CFR Part 60, Subpart VVa as listed in §60.482-1a – 60.483-2a shall be followed, as applicable. As stated in §60.480a(e)(2), complying with the provisions of 40 CFR Part 63, Subpart H satisfies the requirements of §60.482-1a through 60.487a. When choosing to comply with Subpart H, the requirements of §60.485a(d), (e), and (f), and §60.486a(i) and (j) still apply.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(48)a 335-3-11-.06(7)</p>
<p>4. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, weekly sampling and testing shall be conducted on the low pressure absorber (HT-603) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>5. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, weekly sampling and testing shall be conducted on the high pressure absorber (HT-403) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
6. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, weekly sampling and testing shall be conducted on the azeotropic distillation column (HT-741) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.	ADEM Admin. Code r. 335-3-14-.04
7. The calculated 12-month rolling VOC emissions totals for the low pressure absorber (HT-603), high pressure absorber (HT-403), azeotropic distillation column (HT-741), and No. 4 Oxidation unit shall be determined by summing the VOC emissions as specified in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
8. As an indicator of compliance with the particulate matter and opacity requirements on the storage silos scrubber (HT-504), the daily average reflux rate of the scrubber shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.	ADEM Admin. Code r. 335-3-14-.04
9. As an indicator of compliance with the CO emission limit on the catalytic oxidizer (CatOx), the daily average outlet temperature of the catalytic oxidizer (CatOx) reactor shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. As indicated in §63.110(d)(5), the recordkeeping and reporting requirements associated with the applicability determination, process changes, and TRE recalculations of 40 CFR Part 60, Subpart NNN shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
2. Should the TRE of the HON Group 2 process vents be greater than 1.0 but less than or equal to 4.0, the reporting and recordkeeping requirements of §§63.117 and 63.118 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
3. Should the TRE of the HON Group 2 process vents be greater than 4.0, the reporting and recordkeeping requirements of §§63.117(b) and 63.118(c) and (h) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
4. Semiannual Periodic Reports shall be submitted according to §§63.118(f) and 63.152 of Subpart G of the HON.	ADEM Admin. Code r. 335-3-11-.06(6)
5. All recordkeeping and reporting requirements found in §63.152 of Subpart G the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
6. The reporting and recordkeeping requirements for the HON wastewater streams shall be followed as specified in 40 CFR §§63.146 and 63.147, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
7. The leak detection and repair (LDAR) program recordkeeping and reporting requirements in §§63.181 and 63.182 of 40 CFR Part 63, Subpart H and §60.486a(i) and (j) of 40 CFR Part 60, Subpart VVa shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(48)(a) 335-3-11-.06(7)
8. Records of the bypass time for the high pressure absorber (HT-403) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
9. Records of the bypass time for the blower vent (HC-757) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
10. Records of daily average reflux for storage silo scrubber (HT-504) shall be maintained and should be readily available for inspection for a period of (5) five years.	ADEM Admin. Code r. 335-3-14-.04
11. Records of the daily average outlet temperature of the catalytic oxidizer (CatOx) reactor shall be maintained and should be readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>12. Records of the lb VOC emissions/day utilized to calculate the VOC emissions on a monthly basis for each unit shall be maintained and readily available for inspection for a period of five (5) years.</p>	ADEM Admin. Code r. 335-3-14-.04
<p>13. Reports of the VOC emissions from the Nos. 3 – 5 Oxidation Units, generated from the required sampling procedures, shall be submitted within 30 days of the end of every calendar year quarter. For each month during the quarter, the report shall include:</p> <ul style="list-style-type: none"> • the monthly VOC emissions from each unit • a rolling 12 month VOC emissions total for each unit • a rolling 12 month VOC emissions total for all units • the monthly VOC emissions from the No. 3 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit low pressure absorber. • the monthly VOC emissions from the No. 3 Oxidation Unit FT-741 Bottoms wastewater • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit FT-741 Bottoms wastewater • the monthly VOC emissions from the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) • a rolling 12 month VOC emissions total for the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) • the monthly VOC emissions from the No. 4 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 4 Oxidation Unit CatOx scrubber 	ADEM Admin. Code r. 335-3-14-.04

No. 4 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none"> • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit CatOx Scrubber • the monthly VOC emissions from the No. 5 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 5 Oxidation Unit CatOx scrubber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit CatOx Scrubber 	
<p>14. Records of the annual particulate (PM2.5) emissions, in tons per year on a calendar basis, shall be calculated and maintained for a period of five (5) years following resumption of regular operations after implementation of the Unit 4 Upgrade Project as required by ADEM Admin. Code r. 335-3-14-.04(17)(e)3.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>15. A report shall be submitted within 60 days after the end of each calendar year during which records required in Recordkeeping and Reporting Proviso No. 14 are generated as required by ADEM Admin. Code r. 335-3-14-.04(17)(e)4. For each annual report, the report shall include:</p> <ul style="list-style-type: none"> • An annual PM2.5 emissions total for the unit; • An annual PM2.5 emissions total for the low pressure absorber (LPA); • An annual PM2.5 emissions total for the Blower Vent; and • An annual PM2.5 emissions total for any other existing unit or equipment affected by the Unit 4 Upgrade Project and had an increase in PM2.5 emissions as a result of the project. 	<p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 4 PTA Unit Provisos

Description: No. 4 PTA Unit

Emission Unit: 005

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

40 CFR Part 60, Subpart VVa

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Crystallizer Scrubber	PM	E = 17.31P ^{0.16}	335-3-4-.12
(2)	Feed slurry Drum			
(3)	Dryer Scrubber Vent			
(4)	Centrifuge Hold Tank			
(5)	Loading Dust Collectors			
(6)	Storage Silos			
	No. 4 PTA Unit	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
	No. 4 PTA Unit	VOC	Subpart VVa LDAR Program	335-3-10-.02(43)a
	No. 4 PTA Unit	HAP	HON, Subpart H LDAR Program	335-3-11-.06(7)

No. 4 PTA 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.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of the Hazardous Organic NESHAP, as specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
4. This source is subject to 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.	ADEM Admin. Code r. 335-3-11-.06(1)
5. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
6. This source is subject to the reporting requirements of ADEM Admin. Code r. 335-3-14-.04(17)(e) for fine particulate matter (PM _{2.5}).	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter from this source shall not exceed the amount determined by the use of the following equation:	ADEM Admin. Code r. 335-3-4-.12
$E=17.31P^{0.16}$	
Where,	
E= Emission in pounds per hour (lb/hr)	
P= Process weight in tons per hour (TPH) for sources greater than 30 TPH (P ≥ 30 TPH).	

No. 4 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with particulate matter (PM) emission and opacity for the crystallizer, feed slurry drum, and dryer vent scrubbers shall be indicated by a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the particulate matter (PM) and opacity emission rate for the centrifuge tank hold tank and storage silos shall be indicated by performing periodic visual inspections of the source.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Test methods and procedures for the LDAR program equivalent to those in §60.485a of Subpart VVa shall be followed.	ADEM Admin. Code r. 335-3-10-.02(48)a
7. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
Emission Monitoring	
1. The requirements of the leak detection and repair (LDAR) program of 40 CFR Part 60, Subpart VVa as listed in §60.482-1a – 60.483-2a shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(48)a

No. 4 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
2. The requirements of the leak detection and repair (LDAR) program of the HON as listed in 40 CFR 63.162 – 63.180 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
3. As an indicator of compliance with the particulate (PM/PM2.5/PM10) and opacity limits for the crystallization scrubber, the daily average scrubber flow rate shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
4. As an indicator of compliance with the particulate (PM/PM2.5/PM10) and opacity limits for the feed slurry drum scrubber, the daily average scrubber flow shall be maintained at greater than or equal to 20 gpm.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
5. As an indicator of compliance with the particulate (PM/PM2.5/PM10) and opacity limits for the dryer vent scrubber, the daily average total scrubber flow (deionized water and process water) shall be maintained at greater than or equal to 200 gpm.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
6. As an indicator of compliance with the particulate (PM/PM2.5/PM10) and opacity emission limits on the silo dust collectors in this unit (10), weekly visual observations of the silos 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 the emissions are reduced to normal.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
7. As an indicator of compliance with the particulate (PM/PM2.5/PM10) and opacity emission limits on the centrifuge hold tank, weekly visual observations of the tank 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.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)

No. 4 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
<p>Recordkeeping and Reporting Requirements</p> <ol style="list-style-type: none"> 1. Records of the required visual inspections shall be maintained and should be readily available for inspection for a period of five (5) years. These records shall include the date and results of the visual inspections. If visible emission 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 result of the follow-up visual inspection. 2. Records of the daily average scrubber flows for the crystallization scrubber, the feed slurry drum scrubber, and the dryer vent scrubber shall be maintained and should be readily available for inspection for a period of five (5) years. 3. Records of the particulate matter (PM_{2.5}) emissions, in tons per year on a calendar basis, shall be calculated and maintained for a period of five (5) years following resumption of regular operations after implementation of the Unit 4 Upgrade Project as required by ADEM Admin. Code r. 335-3-14-.04(17)(e)3. 4. A report shall be submitted to the Department within 60 days after the end of each calendar year during which the records required in Recordkeeping and Reporting Proviso No. 3 are generated as required by ADEM Admin. Code r. 335-3-14-.04(17)(e)4. For each annual report, the report shall include: <ul style="list-style-type: none"> • An annual PM_{2.5} emissions total for the unit; • An annual PM_{2.5} emissions total for the Crystallizer; • An annual PM_{2.5} emissions total for the Feed Slurry Drum; • An annual PM_{2.5} emissions total for the Dryer Scrubber; • An annual PM_{2.5} emissions total for the Storage Silo; • An annual PM_{2.5} emissions total for the Loading Dust Collectors; 	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p> <p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 4 PTA Unit Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none">• An annual PM2.5 emissions total for the Centrifuge Tank; and • An annual PM2.5 emissions total for any other unit or equipment affected by the Unit 4 Upgrade Project and had an increase in PM2.5 emissions as a result of the project.	

No. 5 Oxidation Unit Informational Summary

Description: No. 5 Terephthalic Acid Oxidation (Ox) Unit

Emission Unit: 006

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

40 CFR Part 60, Subpart VVa
40 CFR Part 60, Subpart III
40 CFR Part 60, Subpart NNN

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1) HHT-603	Low Pressure Absorber	VOC	92 tons/12 months	335-3-14-.04
(2) HHC-757	Blower Vent	Bypass Time	1,000 hours/12 months	335-3-14-.04
(3) HHF-501 A/B	Storage Silos Baghouse	PM2.5/PM10	22 lb/hr	335-3-14-.04
(4) HHT-403	High Pressure Absorber	Bypass Time	600 hours/12 months	335-3-14-.04
(5) HHT-2407	Catalytic Oxidizer (CatOx) Scrubber	VOC	55 tons/12 months	335-3-14-.04
(5) HHT-2407	Catalytic Oxidizer (CatOx) Scrubber	CO	48.4 lb/hr	335-3-11-.06(6)
(6) HHT-761	Dehydration Tower Condensate Wastewater	HAP	Maintain as a Group 2 wastewater stream in accordance with §63.132(c)	335-3-11-.06(6)
(8) HHM-505	Storage Silos Baghouse Scrubber	PM2.5/PM10	20 lb/hr	335-3-14-.04
(8) HHM-505	Storage Silos Baghouse Scrubber	Bypass Time	168 hours/12 months	335-3-14-.04
(1) HHT-603	NNN Group 2 Distillation Unit	VOC	Maintain a TRE > 1.0 in order to remain classified as a Group 2 distillation unit	335-3-10-.02(66)
(4) HHT-403	III Group 2 Oxidation Process	VOC	Maintain a TRE > 1.0 in order to remain classified as a Group 2 oxidation reactor process	335-3-10-.02(61)
(2) HHC-757 (4) HHT-403	HON Group 2 Process Vents	HAP/Halides	Maintain a TRE > 1.0 in order to remain classified as Group 2 process vents	335-3-11-.06(6)
	No. 5 Oxidation Unit Wastewater Streams	HAP	Maintain as HON Group 2 wastewater streams	335-3-11-.06(6)

No. 5 Oxidation Unit Informational Summary

Emission Point	Point Description	Pollutant	Emission Limit	Standard
	No. 5 Oxidation Unit Fugitives	HAP	HON, Subpart H LDAR Program	335-3-11-.06(6)
	No. 5 Oxidation Unit Fugitives	VOC	Subpart VVa LDAR program	335-3-10-.02(48)(a)
	No. 5 Oxidation Unit	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	335-3-4-.01
	No. 5 Oxidation Unit	PT	$E=13.15P^{0.16}$	335-3-4-.12
	No. 5 Oxidation Unit	VOC	8248.3 TPY total VOC emissions from the No. 3, No. 4, and No. 5 Ox units combined calculated on a 12 month total basis	335-3-14-.04

No. 5 Oxidation 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”.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, “Visible Emissions”.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of the Hazardous Organic NESHAP (HON), as specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
4. This source is subject to the requirements of 40 CFR Part 60, Subpart VVa, “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006”. Compliance with this Subpart is determined by compliance with 40 CFR Part 63, Subpart H, as stated in §60.480a(e)(2)	ADEM Admin. Code r. 335-3-10-.02(48)(a) 335-3-11-.06(7)
5. This source is subject to the requirements of 40 CFR Part 60, Subpart III, Standards of Performance for VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes. Compliance with this Subpart is determined by the overlap requirements of 40 CFR Part 63, Subpart G, as listed in §63.110(d)(1)-(3) or (d)(10).	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
6. The dehydration tower is subject to the requirements of 40 CFR Part 60, Subpart NNN, Standards of Performance for VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Distillation Operations. Compliance with this Subpart is determined by the overlap requirements of 40 CFR Part 63, Subpart G, as listed in §63.110(d)(4)-(6) or (d)(10).	ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)
7. This source is subject to the requirements of 40 CFR Part 60, Subpart A, the General Provisions unless otherwise noted in Subparts III, and NNN.	ADEM Admin. Code r. 335-3-10-.02(1)

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
8. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions, unless otherwise specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
9. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter (PT) from this source shall not exceed the amount determined by the use of the following equation: $E=13.15(P)^{0.16}$ <p>Where,</p> <p>E= Emission in pounds per hour (lb/hr) P= Process weight in tons per hour (TPH) for sources greater than 30 TPH (P ≥ 30 TPH).</p>	ADEM Admin. Code r. 335-3-4-.12
3. In order to be classified as a Group 2 process vent as calculated by the procedures in 40 CFR Part 63, Subpart G (“HON”), the TRE value of the applicable process vents shall be maintained at greater than 1.0 as specified in §63.113(a)(3).	ADEM Admin. Code r. 335-3-11-.06(6)
4. The applicable requirements of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G (“HON”) for the dehydration tower and associated recovery device(s) for which the distillation column vents (low pressure absorber) shall be determined as specified in the overlap requirements of the HON stated in §63.110(d)(5) for Group 2 process vents.	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
5. The applicable requirements of 40 CFR Part 60, Subpart III and 40 CFR Part 63, Subpart G (“HON”) for the air oxidation reactor and associated recovery device(s) for which the reactor vents (high pressure absorber) shall be determined as specified in the overlap requirements of the HON stated in §63.110(d)(2) for Group 2 process vents.	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
6. The HON wastewater stream(s) in this unit shall be maintained such that the stream(s) are classified as Group 2 existing sources and are only subject to the recordkeeping and reporting requirements listed in §§63.146(b)(1) and 63.147(b)(8) as indicated in §63.132(a)(3).	ADEM Admin. Code r. 335-3-11-.06(6)
7. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H shall be met for all applicable equipment.	ADEM Admin. Code r. 335-3-11-.06(7)
8. The standards for the leak detection and repair (LDAR) program of 40 CFR Part 60, Subpart VVa shall be met for all applicable equipment.	ADEM Admin. Code r. 335-3-10-.02(43)a
9. The carbon monoxide (CO) emissions from the No. 5 catalytic oxidizer (CatOx) system shall not exceed 48.4 lb/hr as calculated on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
10. The high pressure absorber (HPA) shall be limited to bypass vent time of 600 hours during any 12-month rolling period.	ADEM Admin. Code r. 335-3-14-.04
11. The blower vent shall be limited to bypass vent time of 1000 hours during any 12-month rolling period.	ADEM Admin. Code r. 335-3-14-.04
12. Emissions from the oxidation storage silo shall be routed to the oxidation silo scrubber, except during periods of maintenance on the scrubber, which shall not exceed 168 hours during any 12-month rolling period.	ADEM Admin. Code r. 335-3-14-.04
13. The particulate (PM2.5/PM10) emissions from the No. 5 oxidation silo storage scrubber shall not exceed 20 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
14. During the allowed 168 hour maximum that the unit is bypassing the oxidation silo scrubber, the particulate matter (PM _{2.5} /PM ₁₀) emissions from the oxidation silo baghouse shall not exceed 22 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
15. The volatile organic compound (VOC) emissions from the low pressure absorber (LPA) shall not exceed 92 TPY in any 12 consecutive month period as measured and recorded in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
16. The volatile organic compound (VOC) emissions from the catalytic oxidizer (CatOx) scrubber shall not exceed 55 TPY in any 12 consecutive month period as measured and recorded in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
17. Volatile organic compound (VOC) emissions from the Nos. 3, 4, and 5 Oxidation units combined shall not exceed 8,248 tons calculated based on consecutive 12 month periods as measured and recorded in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PT/PM _{2.5} /PM ₁₀) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the particulate matter (PT/ PM _{2.5} /PM ₁₀) and the opacity emission rate for the oxidation silo baghouse shall be indicated by performing periodic visual inspections of the source.	ADEM admin. Code r. 335-3-1-.05
4. Compliance with the particulate matter (PT/ PM _{2.5} /PM ₁₀) and the opacity emission rate for the oxidation silo scrubber shall be indicated by a continuous parameter monitoring system (CPMS) in accordance with the approved CAM plan.	ADEM Admin. Code r. 335-3-1-.05

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
5. Compliance with the carbon monoxide (CO) emission rate shall be determined by Reference Method 10 or 10B in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the carbon monoxide (CO) emission rate from the catalytic oxidizer (CatOx) system shall be indicated by a continuous parameter monitoring system (CPMS) in accordance with the approved CAM plan.	ADEM Admin. Code r. 335-3-1-.05
7. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
8. Compliance with the volatile organic compound (VOC) emission rate for the low pressure absorber (HHT-603) and distillation tower bottoms (HHT-761) shall be indicated by conducting sampling and performing calculations of annual VOC emissions as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-1-.05
9. Compliance with the volatile organic compound (VOC) emission rate for the catalytic oxidizer (CatOx) scrubber shall be indicated by performing sampling of the high pressure absorber (HHT-403) and performing calculations of annual VOC emissions as measured and recorded using the methods outlined in the most recent VOC monitoring plan.	ADEM Admin. Code r. 335-3-1-.05
10. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
11. The test methods and procedures for group determinations as listed in 40 CFR 60.614(e) – (g) of Subpart III shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(61)

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
12. The test methods and procedures for group determinations as listed in 40 CFR 60.664(d) – (f) of Subpart NNN shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(66)
13. The test methods and procedures for process vent group determinations as listed in §63.115 and 63.116 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
14. The test methods and procedures for determining wastewater applicability, group determinations, and compliance as specified in 40 CFR 63.144 and 63.145 of Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
15. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
16. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 60.485a of Subpart VVa shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(48)(a)
Emission Monitoring	
1. Should the TRE of the Group 2 process vents as calculated in accordance with 40 CFR Part 63, Subpart G (“HON”) be greater than 1.0 but less than or equal to 4.0, the monitoring requirements as specified in §63.114(b) or (c) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
2. The requirements of the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H as listed in §63.162 – 63.180 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
3. The requirements of the leak detection and repair (LDAR) program of 40 CFR Part 60, Subpart VVa as listed in §60.482-1a – 60.483-2a shall be followed, as applicable. As stated in §60.480a(e)(2), complying with the provisions of 40 CFR Part 63, Subpart H satisfies the requirements of §60.482-1a through 60.487a. When choosing to comply with Subpart H, the requirements of §60.485a(d), (e), and (f), and 60.486a(i) and (j) still apply.	ADEM Admin. Code r. 335-3-10-.02(43)a 335-3-11-.06(7)

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<p>4. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, sampling and testing shall be conducted on the low pressure absorber (HHT-603) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>5. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, sampling and testing shall be conducted on the high pressure absorber (HHT-403) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>6. As a determiner of compliance with the 8,248 VOC limit on the Nos. 3-5 Oxidation units, sampling and testing shall be conducted on the distillation tower bottoms (HHT-761) twice a week at intervals not less than three (3) days apart during normal operating conditions. The sampling and analysis shall be conducted according to the most recently submitted emissions monitoring plan. Calculation methods as indicated in the emissions monitoring plan shall be utilized to convert sample test data into the form of lb VOC emissions/day. The VOC emissions shall be calculated on a calendar month basis by summing the lb VOC emissions/day over the total days of each month.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
7. The calculated 12-month rolling VOC emissions totals for the low pressure absorber (HHT-603), high pressure absorber (HHT-403), distillation tower bottoms (HHT-761), and the No. 5 Oxidation unit shall be determined by summing the VOC emissions as specified in the most recent VOC emissions monitoring plan.	ADEM Admin. Code r. 335-3-14-.04
8. As an indicator of compliance with the particulate and opacity emission limits on the oxidation silo scrubber, the daily average reflux flow rate of the oxidation silo scrubber shall be monitored and maintained according to the approved CAM plan.	ADEM Admin. Code r. 335-3-14-.04
9. As an indicator of compliance with the particulate and opacity emission limits on the oxidation silo baghouse, when the oxidation silo scrubber is bypassed, daily visual observations of the oxidation silo baghouse shall be conducted by personnel familiar with Method 9. If visible emissions greater than normal are observed, the facility shall investigate 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.	ADEM Admin. Code r. 335-3-14-.04
10. As an indicator of compliance with the CO emission limit, the daily average outlet temperature of the catalytic oxidizer (CatOx) heater shall be monitored and maintained according to the approved CAM plan.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. As indicated in §63.110(d)(2)(i) and (d)(2)(ii), the recordkeeping and reporting requirements associated with the applicability determination, process changes, and TRE recalculations of 40 CFR Part 60, Subpart III shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(61) 335-3-11-.06(6)
2. As indicated in §63.110(d)(5), the recordkeeping and reporting requirements associated with the applicability determination, process changes, and TRE recalculations of 40 CFR Part 60, Subpart NNN shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(66) 335-3-11-.06(6)

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
3. Should the TRE of the HON Group 2 process vents be greater than 1.0 but less than or equal to 4.0, the reporting and recordkeeping requirements of §§63.117 and 63.118 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
4. Should the TRE of the HON Group 2 process vents be greater than 4.0, the reporting and recordkeeping requirements of §§63.117(b) and 63.118(c) and (h) shall be met, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
5. Semiannual Periodic Reports shall be submitted according to §§63.118(f) and 63.152 40 CFR Part 63, Subpart G (“HON”).	ADEM Admin. Code r. 335-3-11-.06(6)
6. All recordkeeping and reporting requirements found in 63.152 of 40 CFR Part 63, Subpart G (“HON”) shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
7. The recordkeeping and reporting requirements in §§63.181 and 63.182 of 40 CFR Part 63, Subpart H (“HON”) shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
8. The reporting and recordkeeping requirements for the HON wastewater streams shall be followed as specified in §§63.146 and 63.147, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
9. Records of the daily average temperatures from the catalytic oxidizer (CatOx) system shall be recorded and maintained in a form suitable for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
10. Records of daily average reflux for the storage silo scrubber shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
11. Records of the bypass time for the high pressure absorber shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
12. Records of the bypass time for the blower shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
13. Records of the bypass time for storage silo scrubber shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
14. The leak detection and repair (LDAR) program recordkeeping and reporting requirements in §63.181 and 63.182 of 40 CFR Part 63, Subpart H and §60.486a(i) and (j) of 40 CFR Part 60, Subpart VVa shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(43)a 335-3-11-.06(7)
15. Records of the lb VOC emissions/day utilized to calculate the VOC emissions on a monthly basis for each unit shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
16. Reports of the VOC emissions from the Nos. 3 – 5 Oxidation Units, generated from the required sampling procedures, shall be submitted within 30 days of the end of every calendar year quarter. For each month during the quarter, the report shall include: <ul style="list-style-type: none"> • the monthly VOC emissions from each unit • a rolling 12 month VOC emissions total for each unit • a rolling 12 month VOC emissions total for all units • the monthly VOC emissions from the No. 3 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit low pressure absorber. • the monthly VOC emissions from the No. 3 Oxidation Unit HT-741 Bottoms wastewater • a rolling 12 month VOC emissions total for the No. 3 Oxidation Unit HT-741 Bottoms wastewater • the monthly VOC emissions from the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) • a rolling 12 month VOC emissions total for the No. 4 Azeotropic Distillation Column Bottoms wastewater (T-741-Bottoms) 	ADEM Admin. Code r. 335-3-14-.04

No. 5 Oxidation Unit Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none">• the monthly VOC emissions from the No. 4 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 4 Oxidation Unit CatOx scrubber • a rolling 12 month VOC emissions total for the No. 4 Oxidation Unit Catox Scrubber • the monthly VOC emissions from the No. 5 Oxidation Unit low pressure absorber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit low pressure absorber • the monthly VOC emissions from the No. 5 Oxidation Unit CatOx scrubber • a rolling 12 month VOC emissions total for the No. 5 Oxidation Unit CatOx Scrubber	

No. 5 Purification Unit Informational Summary

Description: No. 5 Purification Unit

Emission Unit: 007

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

40 CFR Part 60, Subpart VVa

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Crystallizer Scrubber	PM	$E=17.31P^{0.16}$	335-3-4-.04
(2)	Feed Slurry Drum	PM		
(3)	Dryer Vent	PM		
(4)	Silo Loading Dust Collectors	PM		
(5)	Storage Silos	PM		
(6)	Product Bagging Area	PM		
(6)	Product Bagging Area	PM	0.76 lb/hr	335-3-14-.04
	No. 5 PTA Unit	Opacity	Not more than one 6-minute average opacity greater than 20% in any 60-minute period and no 6-minute average opacity greater than 40%	335-3-4-.01
	No. 5 PTA Unit	VOC	Subpart VVa LDAR Program	335-3-10-.02(43)a
	No. 5 PTA Unit	HAP	HON, Subpart H LDAR Program	335-3-11-.06(7)

No. 5 Purification Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of the Hazardous Organic NESHAP (HON), as specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(5), (6), (7)
4. This source is subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions, unless otherwise specified in 40 CFR Part 63, Subpart F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter from this source shall not exceed the amount determined by the use of the following equation:	ADEM Admin. Code r. 335-3-4-.04
$E=17.31^{0.16}$	
Where,	
E= Emission in pounds per hour (lb/hr)	
P= Process weight in tons per hour (TPH) for sources greater than 30 TPH (P ≥ 30 TPH).	
3. The particulate matter (PM2.5/PM10) emissions from the product bagging area baghouse shall not exceed 0.76 lb/hr as determined based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04

No. 5 Purification Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the particulate matter (PM) and opacity emissions of the crystallizer, feed drum, and dryer scrubbers shall be indicated by a continuous parameter monitoring system (CPMS).	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the particulate matter (PM) and opacity emissions of the loading dust collectors and the storage silos shall be indicated by performing visual inspections of the source during operation.	ADEM Admin. Code r. 335-3-1-.05
5. Test methods and procedures for the LDAR program equivalent to those in §60.485a of Subpart VVa shall be followed.	ADEM Admin. Code r. 335-3-10-.02(48)a
6. The test methods and procedures for the leak detection and repair (LDAR) program as listed in 40 CFR 63.180 of the HON shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
Emission Monitoring	
1. The requirements of the leak detection and repair (LDAR) program of the HON as listed in 40 CFR 63.162 – 63.180 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
2. As an indicator of compliance with the particulate and opacity requirements for the crystallization scrubber, the daily average scrubber flow shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.	ADEM Admin. Code r. 335-3-1-.05

No. 5 Purification Provisos

Federally Enforceable Provisos	Regulations
3. As an indicator of compliance with the particulate and opacity requirements for the feed slurry drum scrubber, the daily average scrubber flow shall be maintained at greater than or equal to 20 gpm.	ADEM Admin. Code r. 335-3-1-.05
4. As an indicator of compliance with the particulate and opacity requirements for the dryer vent scrubber, the daily average scrubber flow shall be maintained at greater than or equal to 200 gpm.	ADEM Admin. Code r. 335-3-1-.05
5. As an indicator of compliance with the particulate and opacity requirements on the silo dust collectors in this unit (10) and the product bagging area, weekly visual observations shall be conducted by personnel familiar with Method 9 of Appendix A of 40 CFR Part 60. 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 have been reduced to normal.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the required visual inspections shall be maintained and readily available for inspection for a period of five (5) years. These records shall include the date and results of the 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.	ADEM Admin. Code r. 335-3-14-.04
2. Records of the daily average scrubber flow rate for the crystallization scrubber, feed slurry drum scrubber, and the dryer vent scrubber shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-1-.05

NDC Unit - Feedstock Informational Summary

Description: Dimethyl Naphthalene Dicarboxylate (NDC) Unit – Feedstock

Emission Unit: 008

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

40 CFR Part 63, Subpart FFFF

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	NB410 Furnace	PM	0.5 lb/MMBtu Each Source	335-3-14-.04
(2)	NB420 Furnace			
(3)	NB430 Furnace			
(4)	NB440 Furnace			
(5)	Catalyst feed hopper	N/A	N/A	N/A
(6)	NDC Flare	N/A	§63.11	335-3-11-.06(83)
(1), (2), (3), (4)	See Above	SO ₂	4 lb/MMBtu each source	335-3-5-.01
(1), (2), (3), (4)	See Above	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)
(1), (2), (3), (4)	See Above	PT	$E = 1.38E^{-0.44}$ Each Source	335-3-4-.03
	NDC Unit – Feedstock Group 1 MON Process Vents	HAP	Reduce emissions by 98% by weight or to an outlet concentration of 20 ppmv as organic HAP or TOC	335-3-11-.06(6)
	NDC Unit – Feedstock	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
	NDC Unit – Feedstock	PT	$E = 3.59P^{0.62}$ Total	335-3-4-.03
	NDC Unit – Feedstock Wastewater	HAP	MON Group 2	335-3-11-.06(83)
	NDC Unit	VOC/HAP	40 CFR Part 63, Subpart UU LDAR Program	335-3-14.04 335-3-11-.06(83)

NDC Unit - Feedstock Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
3. This source is subject to the requirements of the Miscellaneous Organic NESHAP, as specified in 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
4. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
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.	ADEM Admin. Code r. 335-3-11-.06(107)
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 Affected sources are as follows: <ul style="list-style-type: none"> • NB-410 • NB-420 • NB-430 • NB-440 	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Standards	
1. The emission units in this source shall not discharge into the atmosphere, particulate of opacity greater than 20% as determined by a six minute average, except for one 6-minute period in any sixty minute period of greater than 40%.	ADEM Admin. Code r. 335-3-4-.01
2. Furnaces NB-410, NB-420, NB-430, and NB-440 shall not emit particulate emissions in excess of 0.5 lb/MMBtu each based on a 3-hour average.	ADEM Admin. Code r. 335-3-4-.04

NDC Unit – Feedstock Provisos

Federally Enforceable Provisos	Regulations
3. Furnaces NB-410, NB-420, NB-430, and NB-440 shall not emit SO ₂ emissions in excess 4 lb/MMBtu each based on a 3-hour average.	ADEM Admin. Code r. 335-3-5-.01
4. Furnaces NB-410, NB-420, NB-430, and NB-440 shall be limited to burning natural gas.	ADEM Admin. Code r. 335-3-14
5. The particulate emissions from this source shall not exceed the amount based on the following equation: $E = 3.59P^{0.62}$ <p>Where,</p> <p>E = Emissions in lb/hr P = Process weight in tons per hour (TPH) ($P \leq 30$ TPH)</p>	ADEM Admin. Code r. 335-3-4-.03
6. A leak detection and repair (LDAR) program equivalent to 40 CFR Part 63, Subpart UU shall be implemented for this unit for components with a VOC content greater than 5 wt% and a VP of greater than 1 mmHg at 20 °C. In addition to the monitoring requirements of the regulation, connectors shall be monitored annually to limit emissions subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14
7. A leak detection and repair (LDAR) program according to 40 CFR Part 63, Subpart UU shall be implemented for this unit.	ADEM Admin. Code r. 335-3-11-.06(83)
8. The NDC flare shall meet the requirements of §63.11.	ADEM Admin. Code r. 335-3-11-.06(83)
9. All Alke process vents designated as Group 1 process vents shall meet the requirements of 40 CFR Part 63.2455 (i.e. vent to flare).	ADEM Admin. Code r. 335-3-11-.06(83)
10. The MON wastewater streams have been classified as Group 2 existing sources and as such are only subject to the MON recordkeeping and reporting requirements.	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Feedstock Provisos

Federally Enforceable Provisos	Regulations
11. A tune-up shall be performed on the NB 410, NB 420, NB 430, and NB 440 process heaters at the frequency specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the opacity requirement for the flare shall be determined by Reference Method 22 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the nitrogen oxide (NO _x) emission rate shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
7. The test methods and procedures for the leak detection and repair (LDAR) program equivalent to those listed in Subpart UU shall be followed.	ADEM Admin. Code r. 335-3-1-.05

NDC Unit – Feedstock Provisos

Federally Enforceable Provisos	Regulations
8. The test methods and procedures for process vents as stated in 63.2450(g) of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
9. The test methods and procedures for determining wastewater applicability as listed in §63.2485 of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
10. The test methods and procedures of §63.7520 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Monitoring	
1. As an indicator of compliance with the particulate and opacity emission limits on the catalyst feed hopper (NM301), daily visual observations of the baghouse shall be conducted by personnel familiar with Method 9 when the catalyst feed hopper is in operation. If visible emissions greater than normal are observed, the facility shall investigate and initiate any necessary corrective action(s) within 4 hours. After any corrective action(s), an additional observation shall be performed in order to verify that emissions are reduced to normal.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
2. The leak detection and repair (LDAR) monitoring requirements equivalent to those listed in Subpart UU, shall be followed for all subject equipment.	ADEM Admin. Code r. 335-3-11-.06(83)
3. A device capable of continuously detecting the presence of a pilot flame shall be installed, calibrated, and maintained on the NDC flare in accordance with the requirements of 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
Recordkeeping and Reporting Requirements	
1. Recordkeeping and reporting requirements for the leak detection and repair (LDAR) programs shall be equivalent to Subpart UU. These records shall be maintained for a period of five (5) years.	ADEM Admin. Code r. 335-3-14

NDC Unit – Feedstock Provisos

Federally Enforceable Provisos	Regulations
2. Semiannual leak detection and repair (LDAR) reports equivalent to the reports required under Subpart UU shall be submitted to the Department.	ADEM Admin. Code r. 335-3-14
3. Records of the required visual inspections shall be maintained and readily available for inspection for a period of five (5) years. These records shall include the date and results of the inspection. 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 action(s) taken, the date and time of the initial corrective action(s) attempt, and the results of the follow-up inspection.	ADEM Admin. Code r. 335-3-14-.04
4. Hourly records of the pilot flame indicators on the flare shall be maintained including any time and duration for which all pilot flames are absent as required by 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
5. Semiannual periodic reports shall be submitted according to 40 CFR Part 63, Subpart FFFF. These reports shall include the times and durations of all periods in which all pilot flames were absent and all operating days when insufficient data is collected, and times and durations when the vent stream is diverted from the control device.	ADEM Admin. Code r. 335-3-11-.06(83)
6. A periodic report addressing the criteria listed in §63.7550(c)(5)(i) through (iii), (xiv) and (xvii) shall be submitted as stated in §63.7550(c)(1) of 40 CFR Part 63, Subpart DDDDD. The report shall be submitted in accordance with the schedule stated in §63.7550(b), as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)

NDC Unit – Oxidation Informational Summary

Description: Dimethyl Naphthalene Dicarboxylate (NDC) Unit – Oxidation

Emission Unit: 009

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

40 CFR Part 63, Subpart FFFF

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(17) BB-1813	Catalytic Oxidizer (CatOx) Heater	PM	$E=1.38H^{0.44}$	335-3-4-.03
(17) BB-1813	Catalytic Oxidizer (CatOx) Heater	SO ₂	4 lb/MMBtu	335-3-5-.01
(17) BB-1813	Catalytic Oxidizer (CatOx) Heater	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)
(18)	NDC Metals Recovery Unit with Baghouse	PM	1.7 lb/hr	335-3-14-.04
(18)	NDC Metals Recovery Unit with Baghouse	VOC	12 lb/hr	335-3-14-.04
(18)	NDC Metals Recovery Unit with Baghouse	NO _x	1.17 lb/hr	335-3-14-.04
(16)	Catalytic Oxidizer (CatOx) Scrubber	OHAP	Reduce emissions by 98% or 20 ppmv	335-3-11-.06(83)
	NDC Unit –Oxidation	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
	NDC Unit – Oxidation	PT	$E = 3.59P^{0.62}$ Total	335-3-4-.03
	NDC Unit – Oxidation Wastewater	HAP	MON Group 2	335-3-11-.06(83)
	NDC Unit	VOC/HAP	40 CFR Part 63, Subpart UU LDAR Program	335-3-14.04 335-3-11-.06(83)

NDC Unit – Oxidation Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
3. This source is subject to the requirements of the Miscellaneous Organic NESHAP, as specified in 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
4. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
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.	ADEM Admin. Code r. 335-3-11-.06(107)
6. The catalytic oxidizer (CatOx) heater (BB-1813) is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, Standards of Performance for Industrial, Commercial, and Institutional Boilers and Process Heaters.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Standards	
1. The emission units in this source shall not discharge into the atmosphere, particulate of opacity greater than 20% as determined by a six minute average, except for one 6-minute period in any sixty minute period of greater than 40%.	ADEM Admin. Code r. 335-3-4-.01
2. The CatOx heater, BB-1813, shall not emit particulate matter emissions in excess of 0.5 lb/MMBtu based on a 3-hour average.	ADEM Admin. Code r. 335-3-4-.04
3. The CatOx heater, BB-1813, shall not emit SO2 emissions in excess of 4 lb/MMBtu based on a 3-hour average.	ADEM Admin. Code r. 335-3-5-.01
4. The CatOx heater, BB-1813, shall be limited to burning natural gas.	ADEM Admin. Code r. 335-3-14

NDC Unit – Oxidation Provisos

Federally Enforceable Provisos	Regulations
<p>5. The particulate emissions from this source shall not exceed the amount based on the following equation:</p> $E = 3.59P^{0.62}$ <p>Where,</p> <p>E = Emissions in lb/hr P = Process weight in tons per hour (TPH) ($P \leq 30$ TPH)</p>	ADEM Admin. Code r. 335-3-4-.03
<p>6. The volatile organic compound (VOC) emissions from the NDC Metals Recovery unit shall not exceed 12 lb/hr based on a 3-hour average.</p>	ADEM Admin. Code r. 335-3-14
<p>7. The nitrogen oxide (NO_x) emissions from the NDC Metals Recovery unit shall not exceed 1.17 lb/hr based on a 3-hour average.</p>	ADEM Admin. Code r. 335-3-14
<p>8. The particulate matter (PM) emissions from the NDC Metals Recovery unit baghouse shall not exceed 1.7 lb/hr based on a 3-hour average.</p>	ADEM Admin. Code r. 335-3-14
<p>9. A leak detection and repair (LDAR) program equivalent to 40 CFR Part 63, Subpart UU shall be implemented for this unit for components with a VOC content greater than 5 wt% and a VP greater than 1 mm Hg at 20 C that are not subject to the requirements of 40 CFR Part 63, Subpart FFFF. In addition to the monitoring requirements of the regulation, connectors shall be monitored annually to limit emissions subject to synthetic minor PSD limitations.</p>	ADEM Admin. Code r. 335-3-14
<p>10. A leak detection and repair (LDAR) program according to 40 CFR Part 63, Subpart UU shall be implemented for this unit.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>11. The MON wastewater streams have been classified as Group 2 existing sources and as such are only subject to the MON recordkeeping and reporting requirements.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>12. The total organic HAP (OHAP) emissions from the catalytic oxidizer (CatOx) shall be reduced by 98% by weight or to a concentration of 20 ppmv, whichever is less stringent in accordance with 40 CFR Part 63, Subpart FFFF.</p>	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Oxidation Provisos

Federally Enforceable Provisos	Regulations
13. A tune-up shall be performed on the catalytic oxidizer (CatOx) heater (BB-1813) at the frequency specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the nitrogen oxide (NO _x) emission rate shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Test methods and procedures for the leak detection and repair (LDAR) program equivalent to those listed in Subpart UU shall be followed.	ADEM Admin. Code r. 335-3-11-.06(83)
7. The test methods and procedures for determining process vent group determinations as stated in §63.2455(b) of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
8. The test methods and procedures for determining wastewater applicability as listed in §63.2485 of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Oxidation Provisos

Federally Enforceable Provisos	Regulations
9. The test methods and procedures of §63.7520 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Monitoring	
1. As an indicator of compliance with the particulate and opacity emission limits on the NDC Metals Recovery Unit, weekly visual observations of the Metals Recovery Unit stack 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 action within 4 hours. After any corrective actions, an additional observation shall be performed in order to verify that emissions are reduced to normal.	ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)
2. As an indicator of compliance with the VOC and NO _x emission limitations on the NDC Metals Recovery Unit, the firebox temperature calculated as a daily average shall be maintained at greater than 1700 °F while the metals recovery unit is in operation.	ADEM Admin. Code r. 335-3-14-.04
3. The leak detection and repair (LDAR) monitoring requirements equivalent to those listed in Subpart UU, shall be followed for all subject equipment.	ADEM Admin. Code r. 335-3-14
4. As an indicator of compliance with the PM emissions from the NDC Metals Recovery Unit, the pressure drop of the baghouse calculated as a daily average shall be maintained at greater than or equal to the monitoring range established in the approved CAM plan.	ADEM Admin. Code r. 335-3-14
5. To meet Group 1 process vent requirements, temperature monitoring device(s) equipped with a continuous recorder shall be installed on the CatOx reactor inlet and outlet temperatures. These devices shall be calibrated and maintained in accordance with 40 CFR Part 63, Subpart FFFF as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
6. To meet Group 1 process vent requirements, a bypass flow indicator or bypass valve indicator, shall be installed on the bypass line for the CatOx and any bypasses continuously recorded. This device shall be calibrated and maintained in accordance with 40 CFR Part 63, Subpart FFFF as applicable	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Oxidation Provisos

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. The recordkeeping and reporting requirements of 63.1038 and 63.1039 of 40 CFR Part 63, Subpart UU shall be followed, as applicable.	ADEM Admin. Code r. 335-3-14
2. Semiannual leak detection and repair (LDAR) reports equivalent to the reports required under Subpart UU shall be submitted to the Department.	ADEM Admin. Code r. 335-3-14
3. Records of the required visual inspections shall be maintained and readily available for inspection for a period of five (5) years. These records shall include the date and results of the inspection. 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 action(s) taken, the date and time of the initial corrective action(s) attempt, and the results of the follow-up inspection.	ADEM Admin. Code r. 335-3-14-.04
4. The records of the daily average firebox temperature of the NDC Metals Recovery Unit shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
5. The records of the daily average pressure drop of the NDC Metals Recovery Unit shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
6. Records of the inlet and outlet catalytic oxidizer (CatOx) reactor temperatures shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
7. Records of catalytic oxidizer (CatOx) reactor bypass flow indicator shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04
8. Semiannual periodic reports shall be submitted according to 40 CFR Part 63, Subpart FFFF. These reports shall include daily averages for when the CatOx temperatures are outside of the values established in the NOCS, or semiannual report, all operating days when insufficient data is collected, and times and durations when the vent stream is diverted from the control device.	ADEM Admin. Code r. 335-3-11-.06(83)

**NDC Unit – Oxidation
Provisos**

Federally Enforceable Provisos	Regulations
9. A periodic report addressing the criteria listed in §63.7550(c)(5)(i) through (iii), (xiv) and (xvii) shall be submitted as stated in §63.7550(c)(1) of 40 CFR Part 63, Subpart DDDDD. The report shall be submitted in accordance with the schedule stated in §63.7550(b), as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)

NDC Unit – Esterification Informational Summary

Description: Dimethyl Naphthalene Dicarboxylate (NDC) Unit – Esterification

Emission Unit: 010

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

40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1) CM 101A	CM101A Silo	PM	E = 3.59P ^{0.62} Total	335-3-4.03
(2) CM 101B	CM101B Silo	PM		
(3) CM 111	Slurry Recycle Hopper	PM		
(4) CM 401	Recycle Ester Hopper	PM		
(5) CM 503	Product Recycle Silo	PM		
(6) CM 506	Bagging Facility	PM		
(7) CM 453	Molten Hopper Operation Scrubber	PM		
	NDC Unit –Oxidation	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
	NDC Unit -Oxidation Process Vents	HAP	MON Group 2	335-3-11-.06(83)
	NDC Unit – Oxidation Wastewater	HAP	MON Group 2	335-3-11-.06(83)
	NDC Unit	VOC/HAP	40 CFR Part 63, Subpart UU LDAR Program	335-3-14.04 335-3-11-.06(83)

NDC Unit - Esterification Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(1)
3. This source is subject to the requirements of 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (“The MON”).	ADEM Admin. Code r. 335-3-11-.06(83)
4. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. The emission units in this source shall not discharge into the atmosphere, particulate of opacity greater than 20% as determined by a six minute average, except for one 6-minute period in any sixty minute period of greater than 40%.	ADEM Admin. Code r. 335-3-4-.01
2. The particulate emissions from this source shall not exceed the amount based on the following equation:	ADEM Admin. Code r. 335-3-4-.03
$E = 3.59P^{0.62}$	
Where,	
E = Emissions in lb/hr	
P = Process weight in tons per hour (TPH) ($P \leq 30$ TPH)	
3. Particulate emissions from the product tower bottoms molten hopping shall be vented to the scrubber CM453.	ADEM Admin. Code r. 335-3-14
4. All Ester process vents designated as Group 1 process vents in the MON NOCS or semiannual report shall meet the requirements of 40 CFR Part 63.2455 (i.e. vent to flare).	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Esterification Provisos

Federally Enforceable Provisos	Regulations
5. A leak detection and repair (LDAR) program equivalent to 40 CFR Part 63, Subpart UU shall be implemented for this unit for components with a VOC content greater than 5 wt% and a VP of greater than 1 mmHg at 20 °C. In addition to the monitoring requirements of the regulation, connectors shall be monitored annually to limit emissions subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14
6. A leak detection and repair (LDAR) program according to 40 CFR Part 63, Subpart UU shall be implemented for this unit.	ADEM Admin. Code r. 335-3-11-.06(83)
7. All 40 CFR Part 63, Subpart FFFF applicable wastewater streams shall remain Group 2 in accordance with the requirements of 63.2485.	ADEM Admin. Code r. 335-3-11-.06(83)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
4. The test methods and procedures for the leak detection and repair (LDAR) program equivalent to those listed in Subpart UU shall be followed.	ADEM Admin. Code r. 335-3-1-.05
5. The test methods and procedures for determining process vent group determinations as stated in §63.2455(b) of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)

NDC Unit – Esterification Provisos

Federally Enforceable Provisos	Regulations
6. The test methods and procedures for determining wastewater applicability as listed in §63.2485 of 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
Emission Monitoring	
1. As an indicator of compliance with the particulate and opacity emission limitations on CM101A, CM101B, CM111, CM401, CM503, and CM506, weekly visual observations shall be conducted by personnel familiar with Method 9 of Appendix A of 40 CFR Part 60. If visible emissions greater than normal are observed, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective action(s), an additional observation shall be performed in order to verify that emissions are reduced to normal.	ADEM Admin. Code r. 335-3-14-.04
2. As an indicator of compliance with the particulate limitations for the molten hopper operation, the scrubber flowrate shall be maintained at greater than or equal to 6 gpm. The scrubber flow rate shall be calculated based on a daily average.	ADEM Admin. Code r. 335-3-14-.04
3. The leak detection and repair (LDAR) monitoring requirements equivalent to those listed in Subpart UU, shall be followed for all subject equipment.	ADEM Admin. Code r. 335-3-11-.06(83)
4. A device capable of continuously detecting the presence of a pilot flame shall be installed, calibrated, and maintained on the NDC flare in accordance with the requirements of 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
Recordkeeping and Reporting Requirements	
1. Recordkeeping and reporting requirements for the leak detection and repair (LDAR) programs shall be equivalent to Subpart UU. These records shall be maintained for a period of five (5) years.	ADEM Admin. Code r. 335-3-14
2. Semiannual leak detection and repair (LDAR) reports equivalent to the reports required under Subpart UU shall be submitted to the Department.	ADEM Admin. Code r. 335-3-14

NDC Unit – Esterification Provisos

Federally Enforceable Provisos	Regulations
<p>3. Records of the required visual inspections shall be maintained and readily available for inspection for a period of five (5) years. These records shall include the date and results of the inspection. 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 action(s) taken, the date and time of the initial corrective action(s) attempt, and the results of the follow-up inspection.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
<p>4. Records of the daily average product tower bottoms molten hopper scrubber flow shall be maintained and should be readily available for inspection for a period of five (5) years.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)(1)(ii)</p>
<p>5. Hourly records of the pilot flame indicators on the flare shall be maintained including any time and duration for which all pilot flames are absent as required by 40 CFR Part 63, Subpart FFFF.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>
<p>6. Semiannual periodic reports shall be submitted according to 40 CFR Part 63, Subpart FFFF. These reports shall include the times and durations of all periods in which all pilot flames were absent and all operating days when insufficient data is collected, and times and durations when the vent stream is diverted from the control device.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>

NDC Hot Oil Furnace Informational Summary

Description: NDC Hot Oil Furnace (AB-8103)

Emission Unit: 011

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

40 CFR Part 60, Subpart Db

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1) AB-8103	NDC Hot Oil Furnace	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 27%	335-3-4-.01 335-3-10-.02(2)(b)
(1) AB-8103	NDC Hot Oil Furnace	PT	$E=1.38H^{0.44}$	335-3-4-.03
(1) AB-8103	NDC Hot Oil Furnace	PT	≤ 0.85 lb/hr	335-3-14-.04
(1) AB-8103	NDC Hot Oil Furnace	NOx	≤ 6.95 lb/hr	335-3-14-.04
(1) AB-8103	NDC Hot Oil Furnace	NOx	0.1 lb/MMBtu	335-3-10-.02(2)(b)
(1) AB-8103	NDC Hot Oil Furnace	VOC	≤ 3.59 lb/hr	335-3-14-.04
(1) AB-8103	NDC Hot Oil Furnace	SO2	4 lb/MMBtu	335-3-5-.01
(1) AB-8103	NDC Hot Oil Furnace	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)

NDC Hot Oil Furnace Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(1)
3. This source is subject to the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Db.	ADEM Admin. Code r. 335-3-10-.02(1)
4. This source is subject to the requirements of the Federal New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units, Subpart Db.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
5. This source is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (“Boiler MACT”).	ADEM Admin. Code r. 335-3-11-.06(107)
6. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. This source shall not discharge into the atmosphere, particulate of opacity greater than 20% as determined by a six minute average, except for one 6-minute period in any sixty minute period of greater than 40%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter from this source in any one hour shall not exceed the amount determined by use of the following equation:	ADEM Admin. Code r. 335-3-4-.03
$E = 1.38H^{-0.44}$	
Where,	
E = Emissions in pound per MMBtu heat input	
H = Heat input in MMBtu/hr	

NDC Hot Oil Furnace Provisos

Federally Enforceable Provisos	Regulations
3. This source shall be limited to the use of natural gas and NDC by-product fuel gas as fuels.	ADEM Admin. Code r. 335-3-14-.04
4. Sulfur dioxide (SO ₂) emissions from this source shall not exceed 4.0 lb/MMBtu heat input calculated based on a 3-hour average.	ADEM Admin. Code r. 335-3-5-.01
5. Particulate matter (PM) emissions from this source shall not exceed 0.85 lb/hr based on a 3-hour average.	ADEM admin. Code r. 335-3-14-.04
6. Nitrogen dioxide (NO _x) emissions from this source shall not exceed 6.95 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
7. The volatile organic compound (VOC) emissions from this source shall not exceed 3.59 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
8. This boiler shall be subject to the standards for sulfur dioxide, particulate emissions, and nitrogen dioxides of Subpart Db in 60.42b, 60.43b, and 60.44b, as applicable.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
9. Nitrogen dioxide (NO _x) emissions from this source shall not exceed 0.10 lb/MMBtu as stated in §60.44b of Subpart Db.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
10. A NO _x CEM shall be installed, calibrated, and maintained as specified in 60.48b of 40 CFR Part 60, Subpart Db.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
11. A tune-up shall be performed on the boiler at the frequency as specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

NDC Hot Oil Furnace Provisos

Federally Enforceable Provisos	Regulations
3. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the nitrogen oxides (NO _x) emission rate of this unit shall be determined by the use of a continuous emissions monitoring system (CEMS) and Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the volatile organic compound (VOC) requirements shall be determined by Reference Method 18 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM admin. Code r. 335-3-1-.05
6. The test methods and procedures of 40 CFR Part 60, Subpart Db as listed in §§60.45b and 60.46b shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
7. The test methods and procedures of §63.7520 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Monitoring	
1. In accordance with §60.48b(b), continuous emissions monitoring system (CEMS) shall be installed, calibrated, maintained, and operated for measuring NO _x emissions discharged to the atmosphere from this source. The CEMS shall comply with the performance specifications in Appendix B of 40 CFR Part 60. The requirements for the quality procedures in Appendix F of 40 CFR Part 60 shall be followed. The CEMS shall comply with the alternative to the §60.48b(e)(2) previously approved by the Department (12/19/2006). Alternate performance specifications and test methods may be approved provided prior approval by the Department is granted prior to implementation.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
2. Emission monitoring for sulfur dioxide, particulate matter, and nitrogen oxides shall be performed as required in §§60.47b and 60.48b of 40 CFR Part 60, Subpart Db, as applicable.	ADEM Admin. Code r. 335-3-10-.02(2)(b)

NDC Hot Oil Furnace Provisos

Federally Enforceable Provisos	Regulations
<p>3. As an indicator of compliance with the NO_x emission limitations for this source, the NO_x CEM shall be utilized.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(2)(b)</p>
<p>Recordkeeping and Reporting Requirements</p>	
<p>1. The reporting and recordkeeping requirements of §60.49b of 40 CFR Part 60, Subpart Db shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(2)(b)</p>
<p>2. A report shall be submitted quarterly in accordance with the requirements of §60.49b(h) for excess emissions and §60.49b(i) for the NO_x continuous emissions monitoring system (CEMS).</p>	<p>ADEM Admin. Code r. 335-3-10-.02(2)(b)</p>
<p>3. The recordkeeping and reporting of §60.49b of 40 CFR Part 60, Subpart Db shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(2)(b)</p>
<p>4. The recordkeeping and reporting requirements of §63.7550 and §63.7555 and Table 9, respectively of 40 CFR Part 63, Subpart DDDDDD shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(107)</p>
<p>5. When firing gas 1 category fuels, a report shall be submitted with the information specified in §63.7550(c)(1). Submission of the report should be at intervals equal to the tune-up frequency as specified in §63.7550(b)(1)-(4).</p>	<p>ADEM Admin. Code r. 335-3-11-.06(107)</p>

Marine Barge Loading Informational Summary

Description: Marine Barge Loading Dock

Emission Unit: 012

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

40 CFR Part 61, Subpart BB

40 CFR Part 63, Subpart Y

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Marine Barge Loading Dock Flare	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)	Marine Barge Loading Dock Flare	Benzene	40 CFR Part 63, Subpart BB	335-3-11-.02(27)
(1)	Marine Barge Loading Dock Flare	VOC	73 lb/hr while loading material with a vapor pressure less than 1.5 psi	335-3-14-.04
(2)	Marine Barge Loading Dock Storage Vessels	HAP	40 CFR Part 63, Subpart Y	335-3-11-.06(24)

Marine Barge Loading Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Control of Particulate Emissions: Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the requirements of 40 CFR Part 61, Subpart BB, the National Emission Standards for Benzene Emissions from Benzene Transfer Operations.	ADEM Admin. Code r. 335-3-11-.02(27)
4. This source is subject to the requirements of 40 CFR Part 63, Subpart Y, the National Emission Standards for Marine Tank Vessel Loading Operations. As indicated in §63.560(d)(4), the provisions of this subpart pertaining to MACT standards in §63.562(b) and (d) do not apply to benzene emissions from marine tank vessel loading operations that are subject to and complying with 40 CFR Part 61, Subpart BB.	ADEM Admin. Code r. 335-3-11-.02(24)
5. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. The marine barge loading dock flare shall meet the requirements of §60.18(b) through (f) as indicated in §61.302(c).	ADEM Admin. Code r. 335-3-11-.06(27)
3. Each benzene loading rack shall be designed with a vapor collection system that collects all benzene vapors displaced from marine vessels during loading, and is designed to prevent any benzene vapors collected at one loading rack from passing through another loading rack to atmosphere.	ADEM Admin. Code r. 335-3-11-.06(27)

Marine Barge Loading Provisos

Federally Enforceable Provisos	Regulations
4. As stated in §61.302(b), the benzene emissions from this source shall be reduced by 98% by weight.	ADEM Admin. Code r. 335-3-10-.02(27)
5. The volatile organic compound (VOC) emissions from the loading material with a total vapor pressure (TVP) of less than 1.5 psia shall be less than 73 lb/hr.	ADEM Admin. Code r. 335-3-14-.04
6. Loading of benzene materials shall be limited to vessels that are vapor tight in accordance with §61.302(e) of 40 CFR Part 61, Subpart BB.	ADEM Admin. Code r. 335-3-11-.02(27)
7. Inspections of the vapor collection system and flare for detectable emissions shall be performed annually as required by §61.302(k) of 40 CFR Part 61, Subpart BB.	ADEM Admin. Code r. 335-3-11-.02(27)
8. The vapor collection system and barge loading dock flare shall be in operation during loading of any materials subject to 40 CFR Part 61, Subpart BB and during loading of volatile organic compounds (VOC) with vapor pressures greater than or equal to 1.5 psia.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 22 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

Marine Barge Loading Provisos

Federally Enforceable Provisos	Regulations
<p>4. The test methods and procedures for 40 CFR Part 61, Subpart BB, as listed in §61.304(b) shall be followed for the marine loading dock flare, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>
<p>Emission Monitoring</p>	
<p>1. The vapor collection system and the control device shall be inspected for detectable emissions in accordance with the §61.242-11(e) and (f). Inspections shall be performed while loading.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>
<p>2. As stated in §61.303(b), the flare used to comply with the requirements of §61.302(b) shall be installed with a heat sensing device at the pilot light to indicate the presence of a flame during the entire loading cycle.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>
<p>3. As an indicator of compliance with the 73 lb/hr VOC emissions limitations for barge loading, the rate and temperature records for material with a total vapor pressure (TVP) of less than 1.5 psi shall be maintained.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>
<p>Recordkeeping and Reporting Requirements</p>	
<p>1. As stated in §61.305(a)(2), all visible emission readings, heat content determination(s), flow rate measurement(s), maximum permitted velocity calculation(s), and exit velocity determination(s) made during the performance test, continuous records of the flare pilot flame monitoring measured continuously during the loading cycle, duration of all loading cycles and records of all loading cycle during which the pilot flame is absent shall be recorded and readily available for inspection for a period of five (5) years.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>
<p>2. As stated in §61.305(e), records of flare pilot monitoring specified under §61.303(b) and any periods of absence of the pilot flame during a loading cycle shall be maintained and readily available for inspection for a period of five (5) years.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>
<p>3. As stated in §61.305(h), the documentation filed under §61.302(d) and (e) for each marine vessel shall be updated at least annually to reflect current test results. At a minimum the criteria listed in §61.305(h)(1)-(8) shall be documented.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(27)</p>

Marine Barge Loading Provisos

Federally Enforceable Provisos	Regulations
4. A periodic report addressing the criteria listed in §61.305(f)(1)-(5) of 40 CFR Part 61, Subpart BB shall be submitted quarterly.	ADEM Admin. Code r. 335-3-11-.06(27)

Px Loading Informational Summary

Description: Paraxylene (Px) Loading Facility

Emission Unit: 013

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

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

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
N/A	Px Loading Facility	HAP	1.49 psia Rack Weighted Vapor Pressure	335-3-11-.06(6)
N/A	Px Loading Facility	VOC/HAP	379,600,000 Gallons of Px per Year	335-3-14-.04
	Px Loading Facility	HAP	40 CFR Part 63, Subpart H LDAR Program	335-3-11-.06(6)

Px Loading Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(6)
3. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. In order to remain classified as a HON Group 2 transfer rack, the transfer rack shall load material with a weighted average true vapor pressure of less than 10.3 kPa (1.49 psia) in accordance with the requirements of §63.111 of 40 CFR Part 63, Subpart G.	ADEM Admin. Code r. 335-3-11-.06(6)
2. Loading from this transfer rack shall be limited to 379,600,000 gallons of Px during any 12 month period.	ADEM Admin. Code r. 335-3-14-.04
3. This source shall be equipped with a submerged fill loader.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. Compliance with the volatile organic compound (VOC) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the hazardous organic pollutant (HAP) emission rate shall be determined by Reference Method 18, 25, or 25A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

Px Loading Provisos

Federally Enforceable Provisos	Regulations
3. The test methods and procedures for transfer racks as listed in §63.128 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
4. The test methods and procedures for the leak detection and repair (LDAR) program of 40 CFR Part 63, Subpart H as listed in §63.180 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
Emission Monitoring	
1. The standards for the leak detection and repair (LDAR) program listed in §63.162 – 63.180 of 40 CFR Part 63, Subpart H shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
2. The amount of Px loaded in this source shall be maintained in as a monthly rolling total.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. As stated in §63.130(f), the information specified in (f)(1)-(3) shall be recorded, updated annually, and maintained in a form suitable for inspection.	ADEM Admin. Code r. 335-3-11-.06(7)
2. The recordkeeping and reporting requirements as listed in §63.181 and 63.182 of 40 CFR Part 63, Subpart H shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(7)
3. The records of the Px loaded in this source calculated as a 12 month rolling total shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Boiler AB8301 Informational Summary

Description: 400 MMBtu/hr Natural Gas Fired Boiler (AB8301)

Emission Unit: 014

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

40 CFR Part 60, Subpart Db

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Boiler AB8301	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 27%	335-3-4-.01
(1)	Boiler AB8301	Opacity	Not more than one 6-minute average opacity greater than 10% in any 60 minute period.	335-3-14-.04
(1)	Boiler AB8301	PT	$E=1.38H^{0.44}$	335-3-4-.03
(1)	Boiler AB8301	PT	≤ 1.3 lb/hr	335-3-14-.04
(1)	Boiler AB8301	NOx	0.1 lb/MMBtu	335-3-10-.02(2)(b)
(1)	Boiler AB8301	NOx	≤ 0.038 lb/MMBtu and ≤ 15.2 lb/hr at loads $\geq 25\%$; ≤ 0.05 lb/MMBtu and 15.2 lb/hr at loads $< 25\%$	335-3-14-.04
(1)	Boiler AB8301	CO	≤ 45.6 lb/hr	335-3-14-.04
(1)	Boiler AB8301	SO2	4 lb/MMBtu	335-3-5-.01
(1)	Boiler AB8301	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)

Boiler AB8301 Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
4. This source is subject to the requirements of the Federal New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Db.	ADEM Admin. Code r. 335-3-10-02(2)(b)
5. 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 Db.	ADEM Admin. Code r. 335-3-10-.02(1)
6. This source is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (“Boiler MACT”).	ADEM Admin. Code r. 335-3-11-.06(107)
7. This source is subject to the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(1)
8. This source is subject to PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
9. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04

Boiler AB8301 Provisos

Federally Enforceable Provisos	Regulations
<p>Emission Standards</p> <p>1. 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%.</p> <p>2. While firing natural gas, PX fuel gas, and/or anaerobic off gas, this source shall not discharge particulate emissions of more than one 6-minute average opacity greater than 10% in any 60-minute period.</p> <p>3. Emissions of particulate matter from this source in any one hour shall not exceed the amount determined by use of the following equation:</p> $E = 1.38H^{-0.44}$ <p>Where,</p> <p>E = Emissions in pound per MMBtu heat input H = Heat input in MMBtu/hr</p> <p>4. This source shall be limited to the use of natural gas, PX fuel gas, and anaerobic off gas as fuel.</p> <p>5. The particulate matter (PM) emissions shall not exceed 1.3 lb/hr based on a 3-hour average while firing natural gas, PX fuel gas, and/or anaerobic off gas.</p> <p>6. Sulfur dioxide (SO₂) emissions from this source shall not exceed 4.0 lb/MMBtu heat input calculated based on a 3-hour average.</p> <p>7. The nitrogen dioxide (NO_x) emissions from this source shall not exceed 0.038 lb/MMBtu and 15.2 lb/hr while operating at loads greater than or equal to 25%; at loads less than 25% the NO_x emissions shall not exceed 0.050 lb/MMBtu and 15.2 lb/hr. Each of these limits is based on a 3-hour rolling average.</p> <p>8. Nitrogen dioxide (NO_x) emissions from this source shall not exceed 0.10 lb/MMBtu as stated in §60.44b.</p>	<p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-4-.03</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-5-.01</p> <p>ADEM Admin. Code r. 335-3-14-.04</p> <p>ADEM Admin. Code r. 335-3-10-.02(2)(b)</p>

Boiler AB8301 Provisos

Federally Enforceable Provisos	Regulations
9. The carbon monoxide (CO) emissions shall not exceed 45.6 lb/hr based on a 3-hour average.	ADEM Admin. Code r. 335-3-14-.04
10. A tune-up shall be performed on the boiler at the frequency as specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the opacity and particulate matter (PM) emission rate shall be indicated by limiting the type of fuel fired in this source as specified in Emission Standard Proviso No. 4.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the carbon monoxide (CO) requirements shall be determined by Reference Method 10 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM admin. Code r. 335-3-1-.05
5. Compliance with the nitrogen oxides (NO _x) emission rate of this unit shall be determined by the use of a continuous emissions monitoring system (CEMS) and Reference Method 7 or 7E in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
6. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05

Boiler AB8301 Provisos

Federally Enforceable Provisos	Regulations
7. Compliance with the sulfur dioxide (SO ₂) emission rate shall be indicated by limiting the type of fuel fired in this source as specified in Emission Standard Proviso No. 4.	ADEM Admin. Code r. 335-3-1-.05
8. The test methods and procedures of 40 CFR Part 60, Subpart Db as listed in 60.46b shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
9. The test methods and procedures of §63.7520 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Emission Monitoring	
1. In accordance with §60.48b(b), continuous emissions monitoring system (CEMS) shall be installed, calibrated, maintained, and operated for measuring NO _x emissions discharged to the atmosphere from this source. The CEMS shall comply with the performance specifications in Appendix B of 40 CFR Part 60. The requirements for the quality procedures in Appendix F of 40 CFR Part 60 shall be followed. The CEMS shall comply with the alternative to the §60.48b(e)(2) previously approved by the Department (12/19/2006). Alternate performance specifications and test methods may be approved provided prior approval by the Department is granted prior to implementation.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
Recordkeeping and Reporting Requirements	
1. The records of the fuel fired in this source as indicated in §60.49b(d) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
2. The records of the NO _x emissions as listed in §60.49b(g)(1)-(10) shall be maintained and readily available or inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-10-.02(2)(b)
3. A report shall be submitted quarterly in accordance with the requirements of §60.49b(h) for excess emissions and §60.49b(i) for the NO _x continuous emissions monitoring system (CEMS).	ADEM Admin. Code r. 335-3-10-.02(2)(b)
4. The recordkeeping and reporting of §60.49b of 40 CFR Part 60, Subpart Db shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(2)(b)

**Boiler AB8301
Provisos**

Federally Enforceable Provisos	Regulations
5. The recordkeeping and reporting requirements of §63.7550 and §63.7555 and Table 9, respectively of 40 CFR Part 63, Subpart DDDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
6. When firing gas 1 category fuels, a report shall be submitted with the information specified in §63.7550(c)(1). Submission of the report should be at intervals equal to the tune-up frequency as specified in §63.7550(b)(1)-(4).	ADEM Admin. Code r. 335-3-11-.06(107)
7. Records from the NO _x continuous emissions monitoring system (CEMS) shall be maintained and readily available for inspection for a period of five (5) years.	ADEM Admin. Code r. 335-3-14-.04

Boiler 6351B Informational Summary

Description: 249 MMBtu/hr Natural Gas Fired Boiler (6351B)

Emission Unit: 015

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

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
(1)	Boiler 6351B	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 27%	335-3-4-.01 335-3-10-.02(2)(b)
(1)	Boiler 6351B	PT	$E=1.38H^{-0.44}$	335-3-4-.03
(1)	Boiler 6351B	SO ₂	4 lb/MMBtu	335-3-5-.01
(1)	Boiler 6351B	HAP	Work practice standards of §63.7500 and Table 3 of 40 CFR Part 63, Subpart DDDDD	335-3-11-.06(107)

Boiler 6351B Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin. Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin. Code r. 335-3-5-.01
4. This source is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (“Boiler MACT”).	ADEM Admin. Code r. 335-3-11-.06(107)
5. This source is subject to the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(1)
6. This source is subject to synthetic minor PSD emission limitations.	ADEM Admin. Code r. 335-3-14-.04
Emission Standards	
1. 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%.	ADEM Admin. Code r. 335-3-4-.01
2. Emissions of particulate matter from this source in any one hour shall not exceed the amount determined by use of the following equation:	ADEM Admin. Code r. 335-3-4-.03
$E = 1.38H^{-0.44}$	
Where,	
E = Emissions in pound per MMBtu heat input	
H = Heat input in MMBtu/hr	

Boiler 6351B Provisos

Federally Enforceable Provisos	Regulations
3. This source shall be limited to the use of natural gas fuel.	ADEM Admin. Code r. 335-3-14-.04
4. Sulfur dioxide (SO ₂) emissions from this source shall not exceed 4.0 lb/MMBtu heat input calculated based on a 3-hour average.	ADEM Admin. Code r. 335-3-5-.01
5. A tune-up shall be performed on the boiler at the frequency as specified in Table 3 of 40 CFR Part 63, Subpart DDDDD.	ADEM Admin. Code r. 335-3-11-.06(107)
Compliance and Performance Test Methods	
1. Compliance with the opacity requirements in this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
2. Compliance with the particulate matter (PM) emission rate shall be determined by Reference Method 5 in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
3. Compliance with the opacity and particulate requirements shall be indicated by limiting the type of fuel fired in this source.	ADEM Admin. Code r. 335-3-1-.05
4. Compliance with the sulfur dioxide (SO ₂) emission rate shall be determined by Reference Method 6C in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-1-.05
5. Compliance with the sulfur dioxide (SO ₂) emission rate shall be indicated by limiting the type of fuel firing in this source.	ADEM Admin. Code r. 335-3-1-.05
Emission Monitoring	
1. The work practice standards as listed in Table 3 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
Recordkeeping and Reporting Requirements	
1. The recordkeeping and reporting requirements of §63.7550 and §63.7555 and Table 9, respectively of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)

**Boiler 6351B
Provisos**

Federally Enforceable Provisos	Regulations
2. When firing gas 1 category fuels, a report shall be submitted with the information specified in §63.7550(c)(1). Submission of the report should be at intervals equal to the tune-up frequency as specified in §63.7550(b)(1)-(4).	ADEM Admin. Code r. 335-3-11-.06(107)

HON Group 1 Storage Vessels Informational Summary

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

Emission Unit: 016

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

40 CFR Part 60, Subpart K

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

Pollutants Emitted

Emission Point	Capacity	Pollutant	Vapor Pressure	Control Requirement	Standard
AF-116	≥ 151 m ³	HAP	≥ 5.2 kPa but < 76.6 kPa	Internal Floating Roof	335-3-11-.06(6)
AF-6116	≥ 151 m ³	HAP	≥ 5.2 kPa, but < 76.6 kPa	External Floating Roof	335-3-11-.06(6)
AF-6116	N/A	HAP	<3.13 psia at annual avg. T of 60.6 °F	External Floating Roof	335-3-14-.04
AF-6117	≥ 151 m ³	VOC/HAP	≤ 3.13 psia at annual avg. T of 60.6 °F	Internal Floating Roof	335-3-10-.02(9) 335-3-14-.04
AF-6861	≥ 151 m ³	VOC/HAP	≤ 3.13 psia at annual avg. T of 60.6 °F	Internal Floating Roof	335-3-10-.02(9) 335-3-14-.04
AF-6117 AF-6861	N/A	HAP	≥ 5.2 kPa but < 76.6 kPa	HON, Subpart G Group 1 Tank while storing light aromatics	335-3-11-.06(6)
AF-6117 AF-6861	N/A	HAP	N/A	HON, Subpart G Group 2 Tank while storing mixed xylenes	335-3-11-.06(6)
HON Storage Vessels		HAP		Subpart H LDAR program	335-3-11-.06(7)

HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, National Emission Standards for Hazardous Organic Pollutants From Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5),(6),& (7)
3. Storage vessels AF-6117 and AF-6861 are subject to the requirements of the Standards of Performance for Storage Vessels for Petroleum Liquids, as specified in 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(9)
4. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Parr 63, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(1)
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 F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
Emission Standards	
1. The Group 1 storage tanks shall be limited to storage material with a true vapor pressure less than 76.6 kilopascals (kPa) such that the requirements of §63.119(a)(1) are applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
2. The HAP emissions from the storage vessel, AF6116 shall be reduced by operating and maintaining an external floating roof in accordance with the requirements of §63.119(c).	ADEM Admin. Code r. 335-3-11-.06(6)
3. The HAP emissions from the storage vessel, AF116 shall be reduced by operating and maintain a fixed roof and an internal floating roof on the vessel in accordance with the requirements of §63.119(b).	ADEM Admin. Code r. 335-3-11-.06(6)

HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
4. When storage vessels AF-6117 or AF-6861 store HON Group 1 materials, the HAP emissions from the storage vessel shall be reduced by operating and maintaining a fixed roof and an internal floating roof on the vessel in accordance with the requirements of §63.119(b).	ADEM Admin. Code r. 335-3-11-.06(6)
5. Storage vessels AF-6861 and AF-6117 shall be equipped with a floating roof as specified in §60.112(a)(2) of 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(9)
6. Storage vessels AF-6861 and AF-6117 shall be equipped with an internal floating roof.	ADEM Admin. Code r. 335-3-14-.04
7. AF-6116, AF-6861, and AF-6117 shall be limited to storing liquids with vapor pressures less than or equal to 3.13 psia at an annual average ambient temperature of 60.6 °F.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. Compliance with the hazardous organic pollutant (HAP) emission rate from the storage vessel(s) equipped with a fixed roof and internal floating roof shall be determined by the procedures of §63.120(a)(1) through (a)(7).	ADEM Admin. Code r. 335-3-11-.06(6)
2. Compliance with the hazardous organic pollutant (HAP) emission rate from the storage vessel(s) equipped with an external floating roof shall be determined by the procedures of §63.120(b)(1) through (b)(10).	ADEM Admin. Code r. 335-3-11-.06(6)
3. The methods and procedures for storage vessel group determination as indicated in Table 5 for existing sources and Table 6 for new sources in 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
4. The test methods and procedures to determine compliance for storage vessels as listed in §63.120 of 40 CFR Part 63, Subpart G (“HON”) shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
5. For HON storage tank Group determinations, the maximum true vapor pressure of the total organic HAPs stored in these tanks shall be determined as specified in the vapor pressure definition in §63.111 (“HON”).	ADEM Admin. Code r. 335-3-11-.06(6)

HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
<p>6. The vapor pressure of the materials stored in the storage vessels AF-6861 and AF-6117 shall be determined as specified in §60.113 of 40 CFR Part 60, Subpart K.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(9)</p>
<p>Emission Monitoring</p>	
<p>1. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart H.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(7)</p>
<p>2. The monitoring requirements of 60.113 of 40 CFR Part 60, Subpart K shall be followed, as applicable.</p>	<p>ADEM Admin. Code r. 335-3-10-.02(9)</p>
<p>3. In accordance with §63.120(b)(1) of 40 CFR Part 63, Subpart G (“HON”), seal gap tests for the primary seal on Tank No. AF6116 shall be conducted at least once every five (5) years and seal gap tests for the secondary seal on Tank No. AF6116 shall be performed yearly, except as provided under §63.120(b)(7).</p>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>
<p>4. Each time Tank No. AF6116 is 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 40 CFR Part 63, Subpart G (“HON”).</p>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>
<p>5. In accordance with §63.120(a)(3) of 40 CFR Part 63, Subpart G (“HON”), visual inspections of the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) shall be performed each time the storage vessel is emptied and degassed and at least once every five (5) years. Storage vessels AF-6117 or AF-6861 are only required to perform these inspections when storing HON Group 1 materials.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>
<p>6. Prior to changing the material in storage vessels AF-6117 and/or AF-6861 from HON Group 2 material to HON Group 1 material, the visual inspections as described in Emission Monitoring Provision 5 of this permit shall be performed.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>

HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
<p>Recordkeeping and Reporting Requirements</p> <ol style="list-style-type: none"> 1. Records of the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel shall be maintained and readily available for inspection for the life of the vessel while in “HON” service. 2. As indicated in §63.123(c), records of the inspections of the fixed roof and internal floating roof required by §63.120(a) shall be maintained and readily available for inspection for a period of five (5) years. 3. As indicated in §63.123(d), records of the results of each seal gap measurement made in accordance with §63.120(b) including the date of the measurement, the raw data obtained in the measurement, and the calculations described in §63.120(b)(3) and (4) shall be maintained and readily available in a form suitable for inspection for a period of five (5) years. 4. A periodic report addressing the criteria listed in §63.152(c) with the additional information specified in §63.122(d), (e), (f), and (g) shall be submitted semiannually (every 6 calendar months) no later than 60 calendar days after the end of each 6-month period as stated in §63.152(a)(4) in 40 CFR Part 63, Subpart G. 5. As indicated in §63.152(d)(2), the notifications of inspections required by §63.122(h)(1) and (h)(2) shall be submitted when: <ol style="list-style-type: none"> a. AF-6116 or AF-116 is emptied and degassed; AF-6117 or AF-6861 is storing HON Group 1 material and is emptied or degassed; <ol style="list-style-type: none"> i. A 30 calendar day notice is required to be submitted prior to refilling the tank, except as provided under §63.120(a)(6) and §63.120(b)(10)(iii). b. Anytime seal gap measurements will be made on AF-6116. 	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p> <p>ADEM Admin. Code r. 335-3-11-.06(6)</p>

HON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none"> <li style="margin-left: 40px;">i. A 30 calendar day notice is required to be submitted prior to making these measurements. 	
<ul style="list-style-type: none"> 6. The reporting and recordkeeping requirements for storage vessels listed in §63.122 and §63.123, respectively of 40 CFR Part 63, Subpart G shall be followed, as applicable. 	<p>ADEM Admin. Code r. 335-3-11-.06(6)</p>
<ul style="list-style-type: none"> 7. The recordkeeping requirements of §60.113 of 40 CFR Part 60, subpart K shall be followed, as applicable. 	<p>ADEM Admin. Code r. 335-3-10-.02(9)</p>

HON Group 2 Storage Vessels Informational Summary

Description: Storage Vessels Classified as Group 2 with respect to 40 CFR Part 63, Subpart G

Emission Unit: 017

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

40 CFR Part 60, Subpart K

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

Pollutants Emitted

Emission Point	Capacity	Vapor Pressure	Control Requirement	Standard
AF-113	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-114	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-117	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-120	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-121	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-1105	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-1106	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-4117	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-4131	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-4131	N/A	<0.5 psia at 100 °F	Internal Floating Roof	335-3-14-.04
AF-6100	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6101	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6101	N/A	≤ 0.199 psia at annual avg. T of 60.6 °F	Internal Floating Roof	335-3-14-.04
AF-6102	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6102	N/A	<0.5 psia at 100 °F	Internal Floating Roof	335-3-14-.04
AF-6111	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6112	≥ 151 m ³	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)

HON Group 2 Storage Tanks Informational Summary

Emission Point	Capacity	Vapor Pressure	Control Requirement	Standard
AF-6113	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6114	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6120	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6122	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6151	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6151	N/A	$\leq 0.199 \text{ psia}$ at annual avg. T of 60.6 °F	Internal Floating Roof	335-3-14-.04
AF-6151	N/A	N/A	Perform Internal Floating Roof inspections in accordance with §63.120 of 40 CFR Part 63, Subpart G	335-3-14-.04
AF-6152	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6152	N/A	<0.5 psia at 100 °F	Internal Floating Roof	335-3-14-.04
AF-6152	N/A	N/A	Annual Throughput of 83,451,900 gallons	335-3-14-.04
AF-6851	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
AF-6851	N/A	N/A	Annual throughput of 48,000,000 gallons	335-3-14-.04
FD-781	$\geq 151 \text{ m}^3$	< 5.2 kPa	HON Group 2 Storage Vessel	335-3-11-.06(6)
HON Group 2 Storage Vessels		HAP	Subpart H LDAR program	335-3-11-.07(7)

HON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. Storage Vessels AF-4117, AF-6113, AF-6114, AF-6117, AF-6851, and AF-6851 are subject to the requirements of the Standards of Performance for Storage Vessels for Petroleum Liquids, as specified in 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(9)
3. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, National Emission Standards for Hazardous Organic Pollutants From Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5),(6),& (7)
4. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(1)
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 F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
Emission Standards	
1. In order to remain a Group 2 storage vessel with respect to the HON, each material stored in these storage vessels shall have a vapor pressure below 5.2 kPa as indicated in Table 5 of 40 CFR Part 63, Subpart G.	ADEM Admin. Code r. 335-3-11-.06(6)
2. These storage vessels shall remain Group 2 with respect to the HON so that only the requirements of §63.123(a) are applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
3. Storage Vessels AF-4131, AF-6102, AF-6151, and AF-6152 shall be equipped with an internal floating roof.	ADEM Admin. Code r. 335-3-14-.04
4. The annual throughput of AF-6851 shall not exceed 48,000,000 gallons per year as calculated on a 12-month rolling basis.	ADEM Admin. Code r. 335-3-14-.04

HON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
5. The annual throughput of AF-6152 shall not exceed 83,451,900 gallons per year as calculated on a 12-month rolling basis.	ADEM Admin. Code r. 335-3-14-.04
6. Storage vessels AF-6151 and AF-6101 shall be limited to storing liquids with vapor pressures no greater than 0.199 psia at an annual average temperature of 60.6 °F.	ADEM Admin. Code r. 335-3-14-.04
7. Storage vessels AF-6152, AF-6102, and AF-4131 shall be limited to storing liquids with vapor pressures less than 0.5 psia at 100 °F.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. The methods and procedures for storage vessel group determination as indicated in Table 5 for existing sources and Table 6 for new sources in 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
2. The test methods and procedures to determine compliance for storage vessels as listed in §63.120 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
3. The true vapor pressure of the materials stored in AF-113, AF-114, AF-117, AF-120, AF-121, AF-1105, AF-1106, AF-4117, AF-4131, AF-6101, AF-6102, AF-6113, AF-6120, AF-6122, AF-6151, AF-6851 and AF-6152 shall be determined by the procedures specified in §63.111.	ADEM Admin. Code r. 335-3-11-.06(6)
4. The vapor pressures of the materials stored in the storage vessels AF-6851, AF-4117, AF-6113, AF-6114 shall be determined as specified in §60.113 of 40 CFR Part 60, Subpart K.	ADEM Admin. Code r. 335-3-10-.02(9)
Emission Monitoring	
1. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart H.	ADEM Admin. Code r. 335-3-11-.06(7)

HON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
2. The monitoring requirements of §60.113 of 40 CFR Part 60, Subpart K shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(9)
3. The test methods and procedures of §63.120 of the 40 CFR Part 63, Subpart G (“HON”) shall be followed for the internal floating roof of storage vessel AF-6151.	ADEM Admin. Code r. 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel shall be maintained and readily available for inspection for the life of the vessel while in “HON” service.	ADEM Admin. Code r. 335-3-11-.06(6)
2. The recordkeeping requirements for storage vessels listed in §63.123 of 40 CFR Part 63, Subpart G shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
3. The recordkeeping requirements of §60.113 of 40 CFR Part 60, Subpart K shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(9)

MON Group 1 Storage Vessels Informational Summary

Description: Storage Vessels Classified as Group 1 with respect to 40 CFR Part 63, Subpart FFFF

Emission Unit: 018

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

40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point	Capacity	Vapor Pressure	Control Requirement	Standard
AF-103	> 10,000 gallons	≥ 6.9 kPa, but < 76.6 kPa	Internal Floating Roof	335-3-11-.06(83)
AF-104	> 10,000 gallons	≥ 6.9 kPa but < 76.6 kPa	Internal Floating Roof	335-3-11-.06(83)
Process Fugitives			Subpart UU LDAR Program	335-3-11-.06(83)

MON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the requirements of 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (“the MON”).	ADEM Admin. Code r. 335-3-11-.06(83)
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 FFFF.	ADEM Admin. Code r. 335-3-11-.06(1)
Emission Standards	
1. The Group 1 storage tanks shall be limited to storage material with a true vapor pressure less than 76.6 kilopascals (kPa) such that compliance is determined for the storage vessels by complying with the requirements of 40 CFR Part 63, Subpart WW as indicated in Table 4 of 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
2. The HAP emissions from the storage vessels, AF-103 and AF-104 shall be reduced by operating and maintaining an internal floating roof in accordance with the requirements of §63.1062(a)(1).	ADEM Admin. Code r. 335-3-11-.06(83)
3. The design requirements for the internal floating roofs associated with storage vessels AF-103 and AF-104 shall be followed in accordance with the requirements of §63.1063(a).	ADEM Admin. Code r. 335-3-11-.06(83)
4. The internal floating roofs associated with storage vessels AF-103 and AF-104 shall be operated in accordance with the requirements of §63.1063(b).	ADEM Admin. Code r. 335-3-11-.06(83)

MON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
<p>1. Compliance with the hazardous organic pollutant (HAP) emission rate from the storage vessel(s) equipped with a fixed roof and internal floating roof shall be determined by the design requirements of §63.1063(a)(1)(i) and 63.1063(a)(2), the operational requirements of §63.1063(b), and the inspection requirements of §63.1063(c)(1), (d), and (e) of 40 CFR Part 63, Subpart WW.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>2. The test methods and procedures to determine compliance for storage vessels as listed in §63.1063 of 40 CFR Part 63, Subpart WW shall be followed, as applicable.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
Emission Monitoring	
<p>1. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart UU.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>2. Inspections of the internal floating roofs associated with AF-103 and AF-104 shall be performed in accordance with the requirements of §63.1063(d) at the frequency intervals specified in §63.1063(c). Repairs shall be made for any conditions which would cause inspection failure under §63.1063(d) in accordance with the requirements of §63.1063(e).</p>	335-3-11-.06(83)
Recordkeeping and Reporting Requirements	
<p>1. Records of the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel shall be maintained and readily available for inspection for the life of the vessel while in “MON” service.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>2. Records of the inspections of the fixed roof and internal floating roof required by §63.1063(d) shall be maintained and readily available for inspection for a period of five (5) years.</p>	ADEM Admin. Code r. 335-3-11-.06(83)

MON Group 1 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
3. Records of the date(s) when a floating roof is set on its legs or other supporting devices, when the roof is refloated, and whether the process of refloating was continuous shall be maintained and readily available for inspection for a period of five (5) years as indicated in §63.1065(c).	ADEM Admin. Code r. 335-3-11-.06(83)
4. A periodic report addressing the criteria listed in §63.2520(e) shall be submitted semiannually (every 6 calendar months) no later than 60 calendar days after the end of each 6-month period in accordance with the schedule indicated in §63.2520(b)(3) and (4) of 40 CFR Part 63, Subpart FFFF (“MON”).	ADEM Admin. Code r. 335-3-11-.06(83)
5. The reporting and recordkeeping requirements for storage vessels listed in §63.1065 and 63.1066, respectively of 40 CFR Part 63, Subpart WW shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
6. The reporting and recordkeeping requirements of 40 CFR Part 63, Subpart FFFF (“MON”) as listed in §63.2520 and 63.2525 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)

MON Group 2 Storage Vessels Informational Summary

Description: Storage Vessels Classified as Group 2 with respect to 40 CFR Part 63, Subpart FFFF

Emission Unit: 019

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

40 CFR Part 60, Subpart Kb

40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point	Capacity	Vapor Pressure	Control Requirement	Standard
AD-8801	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AD-8801	N/A	N/A	Vent to NDC Flare	335-3-14-.04
AF-101	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AF-102	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AF-111	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AF-111	N/A	N/A	Internal Floating Roof	335-3-14-.04
AF-112	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AF-112	≥ 10,000 gallons	< 6.9 kPa	Internal Floating Roof	335-3-14-.04
AF-1801	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
AF-8104	N/A	< 3.5 kPa	N/A	335-3-14-.04
AF-8802	N/A	< 3.5 kPa	N/A	335-3-14-.04
BF-104	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
BF-104	≥ 151 m ³	< 5.2 kPa	Vent to Scrubber BT-101 or Low Pressure Absorber BT-603	335-3-10-.02(9)(b) 335-3-14-.04
BF-105	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
BF-105	N/A	< 3.5 kPa	Vent to Scrubber BT-101	335-3-14-.04
BF-106	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
BF-106	N/A	N/A	Vent to Scrubber NT-1501	335-3-14-.04

MON Group 2 Storage Vessels Informational Summary

Emission Point	Capacity	Vapor Pressure	Control Requirement	Standard
ND-302	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
ND-302	N/A	< 3.5 kPa	Vent to NDC Flare	335-3-14-.04
ND-610A	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
ND-610A	N/A	< 3.5 kPa	Vented to Scrubber NT-1501	335-3-14-.04
ND-610B	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
ND-610B	N/A	< 3.5 kPa	Vent to Scrubber NT-1501	335-3-14-.04
NF-405	≥ 10,000 gallons	< 6.9 kPa	MON Group 2 Storage Vessel	335-3-11-.06(83)
NF-405	N/A	< 3.5 kPa	Vent to NDC Flare	335-3-14-.04
Process Fugitives			Subpart UU LDAR Program	335-3-11-.06(83)

MON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This source is subject to the standards of performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.	ADEM Admin. Code r. 335-3-10-.02(9)(b)
3. This source is subject to the requirements of 40 CFR Part 63, Subpart F, G, and H, National Emission Standards for Hazardous Organic Pollutants From Synthetic Organic Chemical Manufacturing Industry (“the HON”).	ADEM Admin. Code r. 335-3-11-.06(5),(6),& (7)
4. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Kb.	ADEM Admin. Code r. 335-3-10-.02(1)
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 F, G, and H.	ADEM Admin. Code r. 335-3-11-.06(1)
Emission Standards	
Each material stored in these storage vessels shall have a vapor pressure below 6.9 kPa in order to remain a Group 2 vessel as indicated by the definition of a “Group 1 storage tank” in §63.2550 of 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(6)
2. Storage vessel AF-111 and AF-112 shall be equipped with internal floating roofs.	ADEM Admin. Code r. 335-3-14-.04
3. Storage vessel AD-8801 shall be vented to the NDC flare.	ADEM Admin. Code r. 335-3-14-.04
4. Storage vessel ND-610A, ND-610B, and BF-106 shall be vented to the scrubber, NT-1501.	ADEM Admin. Code r. 335-3-14-.04

MON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
5. Storage vessel ND-302 and NF-405 shall be vented to the NDC flare.	ADEM Admin. Code r. 335-3-14-.04
6. Storage vessel BF-104 shall be vented to the scrubber BT-101 or low pressure absorber BT-603.	ADEM Admin. Code r. 335-3-14-.04
7. The vapor pressure of the material stored in vessel BF-104 shall be maintained at less than 5.2 kPa such that the control requirements of §60.112b are not applicable.	ADEM Admin. Code r. 335-3-10-.02(9)(b)
8. Storage vessel BF-105 shall be vented to the scrubber BT-101.	ADEM Admin. Code r. 335-3-14-.04
Compliance and Performance Test Methods	
1. The methods and procedures for storage vessel group determination as indicated in the definitions of §63.2550 and Table 4 in 40 CFR Part 63, Subpart FFFF shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
2. In order to determine applicability of the storage vessels to 40 CFR Part 60, Subpart Kb and to determine compliance for applicable vessel(s), the vapor pressure of the materials stored in vessels BF-104, BF-105, ND-302, ND-601A, ND-601B, NF-405, AF-8802, and AF-8104 shall be determined as specified in §60.11b of 40 CFR Part 60, Subpart Kb.	ADEM Admin. Code r. 335-3-10-.02(9)(b)
Emission Monitoring	
1. A leak detection and repair (LDAR) program shall be implemented for all applicable equipment in this source in accordance with the requirements of 40 CFR Part 63, Subpart UU.	ADEM Admin. Code r. 335-3-11-.06(7)
Recordkeeping and Reporting Requirements	
1. Records of the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel shall be maintained and readily available for inspection for the life of the vessel while in “MON” service.	ADEM Admin. Code r. 335-3-11-.06(83)

MON Group 2 Storage Vessels Provisos

Federally Enforceable Provisos	Regulations
2. The recordkeeping and reporting requirements of 40 CFR Part 63, Subpart FFFF (“MON”) as listed in §63.2520 and 63.2525 shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(83)
3. Records of the dimensions of each storage vessel described by §60.110b(a) shall be maintained and readily available for inspection for the life of the vessel.	ADEM Admin. Code r. 335-3-10-.02(9)(b)
4. The reporting and recordkeeping requirements of 40 CFR Part 60, Subpart Kb as listed in §60.115b shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(9)(b)

RICE Informational Summary

Description: Reciprocating Internal Combustion Engines (RICE)

Emission Unit: 020

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

40 CFR Part 60, Subpart IIII
40 CFR Part 60, Subpart JJJJ

40 CFR Part 63, Subpart ZZZZ

Pollutants Emitted

Emission Point	Rated Power (hp)	Ignition Type (CI or SI) ¹	Service	Emission Standards	Standard
AM-2010A	217	SI	Emergency	N/A	335-3-11-.06(103)
AM-901	67	SI			335-3-11-.06(103)
FM-101-1	1005	CI			335-3-11-.06(103)
HM-101-1	749	CI			335-3-11-.06(103)
HHM-101-1	749	CI			335-3-11-.06(103)
AG-218B	552	CI			335-3-11-.06(103)
AG-203B	552	CI			335-3-11-.06(103)
AM-8915	150	CI			335-3-11-.06(103)
AM-3003B	122	CI			335-3-11-.06(103)
AM-6860A	60	CI			335-3-11-.06(103)
AM-3000	606	SI			335-3-11-.06(103)
AM-6511	321	SI			335-3-11-.06(103)
EM-1101	270	SI			335-3-11-.06(103)
BM-101-1	1141	CI			335-3-11-.06(103)

RICE Informational Summary

Emission Point	Rated Power (hp)	Ignition Type (CI or SI) ¹	Service	Emission Standards	Standard
AM-4000	480	CI	Emergency	6.4 g/KW-hr HC + NOx	335-3-10-.02(87) 335-3-11-.06(103)
				3.5 g/KW-hr CO	
				0.20 g/KW-hr	
AM-902	36	SI		10 g/HP-hr HC + NOx	335-3-10-.02(88) 335-3-11-.06(103)
				387 g/HP-hr CO	
AM-903	14.8	SI		8 g/HP-hr HC + NOx	335-3-10-.02(88) 335-3-11-.06(103)
				610 g/HP-hr CO	
AM-904	14.8	SI		8 g/HP-hr HC+NOx	335-3-10-.02(88) 335-3-11-.06(103)
				610 g/HP-hr CO	
KM-806-2	531	CI		2.98 g/HP-hr HC + NOx	335-3-10-.02(87) 335-3-11-.06(103)
			0.15 g/HP-hr PM		
			2.61 g/HP-hr CO		
AG-6860A	60	CI	Non-Emergency	N/A	335-3-11-.06(103)
AG-6860B	42	CI			335-3-11-.06(103)
AG-6860E	50	CI			335-3-11-.06(103)
HCD1	67	CI			335-3-11-.06(103)
HCD2	67	CI			335-3-11-.06(103)
CM-3	80	CI			335-3-11-.06(103)

Note 1: CI = compression ignition, SI = spark ignition

RICE Provisos

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. The specific compression ignition (CI) engines as indicated in the summary table of this permit are subject to the National Emission Standards for Hazardous Air Pollutant for Stationary Compression Ignition Reciprocating Internal Combustion Engines, as specified in 40 CFR Part 60, Subpart IIII.	ADEM Admin. Code r. 335-3-10-.02(87)
3. The specific spark ignition (SI) engines as indicated in the summary table of this permit are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Spark Ignition Internal Combustion Engines, as specified in 40 CFR Part 60, Subpart JJJJ.	ADEM Admin. Code r. 335-3-10-.02(88)
4. This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, as specified in 40 CFR Part 63, Subpart ZZZZ. Compliance with 40 CFR Part 63, Subpart ZZZZ shall be determined by complying with 40 CFR Part 60, Subpart IIII for applicable compression ignition (CI) engines and 40 CFR Part 60, Subpart JJJJ for applicable spark ignition (SI) engines.	ADEM Admin. Code r. 335-3-11-.06(103)
5. This source is subject to the requirements of the General Provisions, as specified in 40 CFR Part 60, Subpart A, unless otherwise specified in 40 CFR Part 60, Subpart IIII and/or Subpart JJJJ.	ADEM Admin. Code r. 335-3-10-.02(1)
6. This source is subject to the requirements of the General Provisions, as specified in 40 CFR Part 63, Subpart A, unless otherwise specified in 40 CFR Part 63, Subpart ZZZZ.	ADEM Admin. Code r. 335-3-11-.06(1)

RICE Provisos

Federally Enforceable Provisos	Regulations
<p>Emission Standards</p> <ol style="list-style-type: none"> 1. 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%. 2. For engines subject to 40 CFR Part 60, Subpart IIII (AM-4000, BM-101-1, and KM-806-2), the engines shall meet the applicable emission standards specified for the same model year, maximum engine power (or in the case of fire pumps, NFPA nameplate), and engine cylinder displacement for the engine(s). <ol style="list-style-type: none"> a. Compliance with the emission standards shall be determined by purchasing an engine that is certified to the applicable emission standard(s) (except as otherwise specified in §60.4211 for non-certified engines). The engine must be installed and configured according to the manufacturer’s emission-related specifications, except as permitted in paragraph §60.4211(g) of Subpart IIII. b. For diesel-fueled engines, diesel fuel shall be purchased that meets the requirements stated in §60.4207. 3. For engines subject to 40 CFR Part 60, Subpart JJJJ (AM-902, AM-903, and AM-904), the engines shall meet the applicable emission standards specified for the applicable emission standards specified for the same model year, engine class, and maximum engine power for the engine(s). <ol style="list-style-type: none"> a. Compliance with the emission standards shall be determined by purchasing an engine that is certified to the applicable emission standards (except as otherwise specified in §60.4243 for non-certified engines). 	<p>ADEM Admin. Code r. 335-3-4-.01</p> <p>ADEM Admin. Code r. 335-3-10-.02(87)</p> <p>ADEM Admin. Code r. 335-3-10-.02(88)</p>

RICE Provisos

Federally Enforceable Provisos	Regulations
4. For new emergency engines less than 500 bHP subject to 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII (AM-4000, BM-101-1, and KM-806-2), compliance with Subpart ZZZZ is determined by compliance with Subpart IIII as stated in §63.6590(c).	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-11-.06(103)
5. For new emergency engines less than 500 bHP subject to 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart JJJJ (AM-902, AM-903, and AM-904), compliance with Subpart ZZZZ is determined by compliance with Subpart JJJJ as stated in §63.6590(c).	ADEM Admin. Code r. 335-3-10-.02(88) 335-3-11-.06(103)
6. For new emergency engines greater than 500 bHP (BM-101-1 and KM-806-2), the engine(s) shall be operated in accordance with the requirements of §63.6640(f) in order to remain classified as an emergency stationary RICE.	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-11-.06(103)
7. For existing emergency engines greater than 500 bHP (FM-101-1, HM-101-1, HHM-101-01, AG-203B, AG-218B, and AM-3000), the engines shall be operated in accordance with §63.6645(f) in order to remain classified as an emergency stationary RICE.	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-11-.06(103)
8. For existing emergency engines less than 500 bHP (AM-8915, EM-1101, AM-6511, AM-2010A, AM-3003B, AM-901), the engines shall comply with the applicable requirements of §63.6602 and Table 2c of 40 CFR Part 63, Subpart ZZZZ.	ADEM Admin. Code r. 335-3-11-.06(103)
9. For existing engines less than 100 bHP (AG-6860A, AG-6860B, and AG-6860E), the engines shall comply with the application requirements of §63.6602 and Table 2c of 40 CFR Par 63, Subpart ZZZZ.	ADEM Admin. Code r. 335-3-11-.06(103)
10. For engines subject to 40 CFR Part 60, Subpart IIII, Subpart JJJJ, and 40 CFR Part 63, Subpart ZZZZ, the engines shall be operated in accordance with the requirements of §§60.4211(f), 60.4245(d), and 63.6640(f)(1)-(f)(4).	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-10-.02(88) 335-3-11-.06(103)

RICE Provisos

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods	
1. The compliance and performance test methods of §63.6610 – 63.6630 of 40 CFR Part 63, Subpart ZZZZ shall be followed, as applicable.	ADEM Admin. Code r. 335-3-11-.06(107)
2. The compliance and performance test methods of §60.4210 – 60.4213 of 40 CFR Part 60, Subpart IIII shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(87)
3. The compliance and performance test methods of §60.4243 – 60.4244 of 40 CFR Part 60, Subpart JJJJ shall be followed, as applicable.	ADEM Admin. Code r. 335-3-10-.02(88)
Emission Monitoring	
1. For engines subject to 40 CFR Part 63, Subpart IIII (BM801-1, KM-806-2, and AM-4000), the engines shall meet the following requirements, except as permitted under §60.4211(g) or as otherwise specified in §60.4211 for non-certified engines: <ul style="list-style-type: none"> a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer’s emission-related written instructions; b. Change only those emission-related settings that are permitted by the manufacturer; and c. Meet the requirements of 40 CFR Part 89, 94, and/or 1068, as applicable. 	ADEM Admin. Code r. 335-3-10-.02(87)
2. For engines subject to 40 CFR Part 63, Subpart JJJJ, the engines shall comply with the following requirements, except as specified in 60.4243 for non-certified engines: <ul style="list-style-type: none"> a. Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer’s emission-related written instructions; b. Meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as applicable; 	ADEM Admin. Code r. 335-3-10-.02(87)

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<ul style="list-style-type: none"> c. Air-to-fuel ratio controllers must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. 	
<ul style="list-style-type: none"> 3. For existing engines less than 500 bHP subject to 40 CFR Part 63, Subpart ZZZZ, the engines shall be operated and maintained according to the manufacturer’s emission-related instructions or develop a maintenance plan that provides for, to the extent practicable, the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. 	ADEM Admin. Code r. 335-3-11-.06(103)
<ul style="list-style-type: none"> 4. For emergency engines subject to 40 CFR Part 60, Subpart IIII, Subpart JJJJ, and/or 40 CFR Part 63, Subpart ZZZZ, a non-resettable hour meter shall be installed. 	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-10-.02(88) 335-3-11-.06(103)
Recordkeeping and Reporting Requirements	
<ul style="list-style-type: none"> 1. For existing emergency engines subject to 40 CFR Part 63, Subpart ZZZZ, new emergency engines greater than 500 bHP, and new emergency engines less than 500 bHP, records of the operation and maintenance of the engines shall be maintained in accordance with §63.6655. At a minimum, these records shall include: <ul style="list-style-type: none"> a. For each period of operation, the length of operation and the reason the engine was in operation during that time. For periods of operation designated as “emergency operation”, the records shall reflect what classified the operation as emergency (if the emergency engine does not meet the standards applicable to non-emergency engines); b. The total number of hours the engine was operated during a calendar year subtotaled by the reason the engine was in operation (if the emergency engine does not meet the standards applicable to the non-emergency engines); c. The dates of each inspection and replacement of air cleaners (for CI engines), spark plugs (for SI engines), hoses, and belts with corresponding hours on the hour meter; and 	ADEM Admin. Code r. 335-3-10-.02(87) 335-3-10-.02(88) 335-3-11-.06(103)

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<p>d. The dates and nature of other emission-related repair and maintenance performed.</p> <p>2. For existing CI engines less than 100 bHP, records of the operation and maintenance of these units in accordance with §63.6655. At a minimum, these records shall include:</p> <p style="padding-left: 40px;">a. The dates of each oil and filter change with the corresponding hour on the hour meter,</p> <p style="padding-left: 40px;">b. The dates of each inspection and replacement of air cleaners, hoses, and belts with the corresponding hour on the hour meter; and</p> <p style="padding-left: 40px;">c. The dates and nature of other emission-related repairs and maintenance performed.</p> <p>3. For existing emergency engines subject to 40 CFR Part 63, Subpart ZZZZ, new emergency engines greater than 500 bHP, and new emergency engines less than 500 bHP, records of the hours of operation of the engines in accordance with §63.6640(f) in order to show that the emergency engines meet the definition of emergency.</p> <p>4. For engines subject to 40 CFR Part 60, Subpart IIII and Subpart JJJJ, the records of the operation and maintenance of these units in accordance with §§63.4214 (for CI engines) and 63.4245 (for SI engines). At a minimum, these records shall include:</p> <p style="padding-left: 40px;">a. Maintenance conducted on the engine;</p> <p style="padding-left: 40px;">b. For certified engines, documentation from the manufacturer that the engine is certified to meet the emission standards;</p> <p style="padding-left: 40px;">c. Records that fuels purchased meet the applicable specifications;</p>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p> <p>ADEEM Admin. Code r. 335-3-11-.06(103)</p> <p>ADEM Admin. Code r. 335-3-10-.02(87) 335-3-10-.02(88) 335-3-11-.06(103)</p>

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<p>d. Documentation that the engine meets the emission standards if the stationary SI or CI engine is not a certified engine or a certified engine operating in a non-certified manner; and</p> <p>e. Records of the hours of operation that is recorded through the non-resettable hour meter, including the time of operation of the engine and the reason the engine was in operation during that time (if the emergency engine does not meet the standards applicable to the non-emergency engines).</p> <p>5. For existing emergency engines less than 500 bHP subject to 40 CFR Part 63, Subpart ZZZZ and existing CI engines less than 100 bHP, records of the operation and maintenance instructions for the unit or the maintenance plan developed in accordance with §63.6625(e) shall be maintained on-site for the life of each engine.</p> <p>6. For emergency engines subject to 40 CFR Part 60, Subpart IIII, JJJJ, and 40 CFR Part 63, Subpart ZZZZ, all the information (including all reports and notifications) required by 40 CFR Part 63, Subpart A and ZZZZ and 40 CFR Part 60, Subpart A, IIII, and JJJJ for these units shall be recorded in a form suitable and readily available for inspection and review. The files shall be retained for at least 5 years, following the date of each occurrence, measurement, maintenance, corrective action, report, or record. In accordance with 40 CFR Part 63, Subpart ZZZZ, at a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off-site. Such files may be maintained on microfilm, on a compute, on computer floppy disks, on magnetic tape discs, or on microfiche.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(103)</p> <p>ADEM Admin. Code r. 335-3-10-.02(87) 335-3-10-.02(88) 335-3-11-.06(103)</p>

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7. For existing emergency engines subject to 40 CFR Part 63, Subpart ZZZZ and existing CI engines less than 100 bHP, any failure to perform a work practice on the schedule required, including instances when the work practice standard was not performed due to emergency operation or unacceptable risk under a federal, state, or local law. A report shall be submitted within two (2) working days of the deviation and shall provide an explanation to why the work practice requirement was not performed.	ADEM Admin. Code r. 335-3-11-.06(103)