



# MAJOR SOURCE OPERATING PERMIT

**PERMITTEE:** WestRock Mill Company, LLC

**FACILITY NAME:** WestRock Mill Company, LLC – Demopolis Mill

**FACILITY/PERMIT NO.:** 105-0001

**LOCATION:** Demopolis, AL

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

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

**Issuance Date:** DRAFT

**Effective Date:** DRAFT

**Expiration Date:** DRAFT

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Alabama Department of Environmental Management

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## General Permit Provisos

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

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| notification of planned changes or anticipated noncompliance will not stay any permit condition.   |                      |
| <p><b>6. <u>Property Rights</u></b></p> <p>The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>  | Rule 335-3-16-.05(i) |
| <p><b>7. <u>Submission of Information</u></b></p> <p>The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>  | Rule 335-3-16-.05(j) |
| <p><b>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></b></p> <p>No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.</p>  | Rule 335-3-16-.05(k) |
| <p><b>9. <u>Certification of Truth, Accuracy, and Completeness:</u></b></p> <p>Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.</p>   | Rule 335-3-16-.07(a) |
| <p><b>10. <u>Inspection and Entry</u></b></p> <p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:</p> <ul style="list-style-type: none"> <li>(a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;</li> <li>(b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;</li> <li>(c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment),</li> </ul> | Rule 335-3-16-.07(b) |

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| <p>practices, or operations regulated or required pursuant to this permit;</p> <p>(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.</p> <p><b>11. <u>Compliance Provisions</u></b></p> <p>(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.</p> <p>(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.</p> <p><b>12. <u>Compliance Certification</u></b></p> <p>A compliance certification shall be submitted annually within 60 days of December 31<sup>st</sup>.</p> <p>(a) The compliance certification shall include the following:</p> <p>(1) The identification of each term or condition of this permit that is the basis of the certification;</p> <p>(2) The compliance status;</p> <p>(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 Recordkeeping Requirements);</p> <p>(4) Whether compliance has been continuous or intermittent;</p> <p>(5) Such other facts as the Department may require to determine the compliance status of the source;</p> <p>(b) The compliance certification shall be submitted to:</p> <p style="text-align: center;">Alabama Department of Environmental Management<br/>Air Division<br/>P.O. Box 301463<br/>Montgomery, AL 36130-1463</p> <p style="text-align: center;">and to:</p> <p style="text-align: center;">EPA through the Compliance and Emissions Data</p> | <p>Rule 335-3-16-.07(c)</p> <p>Rule 335-3-16-.07(e)</p> |



## General Permit Provisos

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| <p>Reporting Interface (CEDRI) located on EPA's Central Data Exchange (CDX)</p>   |   |
| <p><b>13. <u>Reopening for Cause</u></b></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <ul style="list-style-type: none"> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</li> </ul> | <p>Rule 335-3-16-.13(5)</p>                           |
| <p><b>14. <u>Additional Rules and Regulations</u></b></p> <p>This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.</p>   | <p>§22-28-16(d), Code of Alabama 1975, as amended</p> |
| <p><b>15. <u>Equipment Maintenance or Breakdown</u></b></p> <ul style="list-style-type: none"> <li>(a) In the case of shutdown for more than one (1) hour of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to</li> </ul>   | <p>Rule 335-3-1-.07(1), (2)</p>                       |

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| <p>control. Such prior notice shall include, but is not limited to the following:</p> <ol style="list-style-type: none"> <li>(1) Identification of the specific facility to be taken out of service as well as its location and permit number;</li> <li>(2) The expected length of time that the air pollution control equipment will be out of service;</li> <li>(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;</li> <li>(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;</li> <li>(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.</li> </ol> <p>(b) In the event that there is a breakdown of equipment or upset of process for a period exceeding one (1) hour 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><b>16. <u>Operation of Capture and Control Devices</u></b></p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants for purposes of meeting applicable requirements. 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> |
| <p><b>17. <u>Obnoxious Odors</u></b></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p>   | <p>Rule 335-3-1-.08</p>                               |

## General Permit Provisos

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|---|----------------------------------|
| <p><b>18. <u>Fugitive Dust</u></b></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:</p> <p style="padding-left: 40px;">(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;</p> <p style="padding-left: 40px;">(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;</p> <p style="padding-left: 40px;">(3) By paving;</p> <p style="padding-left: 40px;">(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.</p> <p>Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne.</p> | <p>Rule 335-3-4-.02</p>          |
| <p><b>19. <u>Additions and Revisions</u></b></p> <p>Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.</p>   | <p>Rule 335-3-16-.13 and .14</p> |
| <p><b>20. <u>Recordkeeping Requirements</u></b></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <p style="padding-left: 40px;">(1) The date, place, and time of all sampling or measurements;</p> <p style="padding-left: 40px;">(2) The date analyses were performed;</p> <p style="padding-left: 40px;">(3) The company or entity that performed the analyses;</p> <p style="padding-left: 40px;">(4) The analytical techniques or methods used;</p>   | <p>Rule 335-3-16-.05(c)2</p>     |

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| <p>(5) The results of all analyses; and</p> <p>(6) The operating conditions that existed at the time of sampling or measurement.</p> <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.</p> <p><b>21. <u>Reporting Requirements</u></b></p> <p>(a) Reports to the Department of any required monitoring shall be semi-annually on February 28<sup>th</sup> and August 31<sup>st</sup>. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).</p> <p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p> <p><b>22. <u>Emission Testing Requirements</u></b></p> <p>Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. As allowed in MACT and other regulations, flexibility is provided to use alternative test methods, as approved by EPA, ADEM or permit condition.</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>(1) 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</p> | <p></p> <p></p> <p></p> <p>Rule 335-3-16-.05(c)3</p> <p></p> <p></p> <p>Rule 335-3-1-.05(3) and<br/>Rule 335-3-1-.04(1)</p> <p></p> <p>Rule 335-3-1-.04</p> |

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| <p>sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.</p> <p>(2) 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>(3) 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>(4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.</p> <p>A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division or an alternative time is specified by an applicable regulation.</p> | <p>Rule 335-3-1-.04</p>    |
| <p><b>23. <u>Payment of Emission Fees</u></b></p> <p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.</p>  | <p>Rule 335-1-7-.04</p>    |
| <p><b>24. <u>Other Reporting and Testing Requirements</u></b></p> <p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.</p>  | <p>Rule 335-3-1-.04(1)</p> |
| <p><b>25. <u>Title VI Requirements (Refrigerants)</u></b></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.</p> <p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing,</p>  | <p>40 CFR Part 82</p>      |

## General Permit Provisos

| Federally Enforceable Provisos   | Regulations             |
|--|-------------------------|
| <p>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><b>26. <u>Chemical Accidental Prevention Provisions</u></b></p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <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 68.10(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> | 40 CFR Part 68          |
| <p><b>27. <u>Display of Permit</u></b></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by any or all persons who may request to see it.</p>  | Rule 335-3-14-.01(1)(d) |
| <p><b>28. <u>Circumvention</u></b></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in 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>   | Rule 335-3-1-.10        |
| <p><b>29. <u>Visible Emissions</u></b></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part</p>  | Rule 335-3-4-.01(1)     |

## General Permit Provisos

| Federally Enforceable Provisos  | Regulations                                     |
|---|---|
| <p>60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>   |   |
| <p><b>30. <u>Fuel-Burning Equipment</u></b></p> <p>(a) 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.</p> <p>(b) 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><b>31. <u>Process Industries – General</u></b></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><b>32. <u>Averaging Time for Emission Limits</u></b></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>                         |
| <p><b>33. Permit Shield</b></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 the application for this permit. Under this shield, it has been determined that requirements listed as non-applicable in such section are not applicable to this source.</p> | <p>Rule 335-3-16-.10</p>                        |

## No. 3 Multiple Effect Evaporator System Informational Summary

**Description:** No. 3 Multiple Effect Evaporator System

**Emission Unit No:** 025

**Installation Date:** 1992                      **Reconstruction/Modification Date:** 1997

**Operating Capacity:** 175,000 lb/hr BLS  
4.2 MMlb/day at 14% solids feed concentration & 75% solids

**Operating Schedule:** 8760 hours/year

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

**40 CFR Part 60 Subpart BB**

**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| <b>Emission Point</b> | <b>Point Description</b>                | <b>Pollutant</b> | <b>Emission Limit</b> | <b>Standard</b>        |
|-----------------------|---|------------------|-----------------------|------------------------|
| X025                  | No. 3 Multiple Effect Evaporator System | TRS              | Incineration          | Rule 335-3-10-.02 (28) |
| X025                  | No. 3 Multiple Effect Evaporator System | HAPs             | Incineration          | Rule 335-3-11-.06 (18) |



## No. 3 Multiple Effect Evaporator System Provisos

| Federally Enforceable Provisos   | Regulations                    |
|--|--------------------------------|
| <b>Applicability</b>   |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “Major Source Operating Permits”.  | Rule 335-3-16-.03              |
| 2. This source is subject to federal New Source Performance Standards Subpart BB and 40 CFR 60 Subpart A, General Provisions.  | Rule 335-3-10-.02 (1) and (28) |
| 3. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S (See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements). | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>  |                                |
| 1. All gases discharged that contain total reduced sulfur in excess of 5 parts per million by volume on a dry basis, corrected to 10 percent oxygen, shall be incinerated in either the No. 4 or 5 Power Boiler.   | Rule 335-3-10-.02 (28)         |
| 2. See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.   | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>  |                                |
| 1. See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.   | Rule 335-3-11-.06 (18)         |
| <b>Emission Monitoring</b>   |                                |
| 1. See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.   | Rule 335-3-11-.06 (18)         |
| 2. For total reduced sulfur periodic monitoring at least once per day mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours.   | Rule 335-3-16-.05 (c)          |
| <b>Recordkeeping and Reporting Requirements</b>  |                                |
| 1. See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.   | Rule 335-3-11-.06 (18)         |
| 2. Once per day records of whether or not total reduced sulfur gases are being incinerated shall be made and maintained on file available for inspection for a period of five years.   | Rule 335-3-16-.05 (c)          |

## No. 3 Recovery Furnace Informational Summary

**Description:** No. 3 Recovery Furnace

**Emission Unit No:** 022

**Installation Date:** 1992                      **Reconstruction/Modification Date:** 2003

**Operating Capacity:** 193,000 lb/hr BLS  
529.2 MMBtu/hr on fossil fuels

**Operating Schedule:** 8760 hours/year

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

**40 CFR Part 60 Subpart Db**  
**40 CFR Part 60 Subpart BB**  
**40 CFR Part 63 Subpart MM**

### Pollutants Emitted

| Emission Point | Point Description      | Pollutant                      | Emission Limit   | Standard  |
|----------------|------------------------|--------------------------------|--|---|
| X022           | No. 3 Recovery Furnace | PM                             | ≤ 0.021 gr/DSCF at 8 % O <sub>2</sub> and<br>≤ 44.9 lb/hr  | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | TRS                            | ≤ 5 ppmv at 8% O <sub>2</sub> and<br>≤ 11.0 lb/hr  | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| X022           | No. 3 Recovery Furnace | SO <sub>2</sub>                | ≤ 100 ppmv at 8% O <sub>2</sub> and<br>≤ 252.9 lb/hr (Three-hour average)<br>when black liquor is being fired;<br>≤ 0.05% when fuel oil is fired | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | NO <sub>x</sub>                | ≤ 110 ppmv at 8% O <sub>2</sub> and<br>≤ 199.9 lb/hr when black liquor is<br>fired   | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | Opacity                        | ≤ 20%  | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | Opacity                        | <u>≤ 35% for 2% or more of operating<br/>time while firing spent pulping<br/>liquor in any semiannual period</u>                                 | Rule 335-3-11-.06 (38)                          |
| X022           | No. 3 Recovery Furnace | CO                             | ≤ 300 ppmv at 8% O <sub>2</sub> and<br>≤ 331.9 lb/hr   | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | VOC                            | ≤ 0.04 lb/MMBtu and<br>≤ 43.2 lb/hr (as carbon)  | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | H <sub>2</sub> SO <sub>4</sub> | ≤ 3.78 lbs/hr  | Rule 335-3-14-.04 (9)                           |
| X022           | No. 3 Recovery Furnace | HAPs                           | PM as a surrogate, ≤ 0.044 gr/dscf<br>at 8% O <sub>2</sub>   | Rule 335-3-11-.06 (38)                          |

**No. 3 Recovery Furnace  
Provisos  
Permitted Fuels**

| <b>Fuel</b>    | <b>Max % Sulfur</b> | <b>Max % Ash</b> |
|----------------|---------------------|------------------|
| No. 2 Fuel Oil | 0.05                |                  |
| Natural Gas    | N/A                 | N/A              |
| BLS            | N/A                 | N/A              |

## No. 3 Recovery Furnace Provisos

| Federally Enforceable Provisos  | Regulations                                     |
|---|---|
| <b>Applicability</b>  |   |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03                               |
| 2. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02(1) and (28) New Source Performance Standards Subpart BB for kraft pulp mills.  | Rule 335-3-10-.02 (1) and (28)                  |
| 3. This Source is subject to the requirements of ADEM Admin. Code R. 335-3-14-.04(9) Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits for particulate matter, total reduced sulfur, sulfur dioxide, nitrogen oxides, opacity, carbon monoxide, volatile organic compounds, and sulfuric acid mists.  | Rule 335-3-14-.04 (9)                           |
| 4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02(1) and (2)(b) New Source Performance Standards Subpart Db for nitrogen oxide emissions when distillate fuel oil or natural gas are fired.  | Rule 335-3-10-.02 (1) and (2)(b)                |
| 5. This source is subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM as referenced in ADEM Admin. Code R. 335-3-11-.06(38).  | Rule 335-3-11-.06 (1) and (38)                  |
| <b>Emission Standards</b>   |   |
| 1. Particulate matter emissions shall not exceed the more stringent of 0.021 grains per DSCF at 8% oxygen and 44.9 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 2. Total reduced sulfur emissions shall not exceed the more stringent of 5 parts per million by volume at 8% oxygen and 11.0 pounds per hour.   | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| 3. Sulfur dioxide emissions shall not exceed the more stringent of 100 parts per million by volume at 8% oxygen and 252.9 pounds per hour (three-hour average) when black liquor is being fired.  | Rule 335-3-14-.04 (9)                           |
| 4. When firing fuel oil, this unit shall only fire fuel oil that contains no more than 0.05% sulfur by weight.  | Rule 335-3-14-.04 (9)                           |
| 5. Nitrogen oxide emissions shall not exceed the more stringent of 110 parts per million per volume at 8% oxygen and 199.9 pounds per hour when black liquor is fired.  | Rule 335-3-14-.04 (9)                           |
| 6. Pursuant to 40 CFR Part 60.44b(c) or 60.44b(d), depending on the combination of fossil fuel fired, the fossil fuel annual capacity factor shall be ten (10) percent or less. The annual capacity factor is defined as the ratio between the actual heat input to the boiler from fossil fuel during a calendar year and the potential heat input to the boiler had it been operated 8,760 hours at the maximum steady state design heat input. | Rule 335-3-10-.02 (2)(b)                        |
| 7. The nitrogen oxide emission rates apply at all times except during start-up and shut-down. Start-up is defined as the period between the introduction of fire into the boiler until the boiler is capable of operation only on black liquor and shall not exceed 16 hours. During shut-down, liquor is gradually replaced with oil until the unit fires only oil. Then the oil is gradually removed. Shut-down shall not exceed 12 hours.      | Rule 335-3-14-.04 (9)                           |

## No. 3 Recovery Furnace Provisos

| Federally Enforceable Provisos   | Regulations                                     |
|--|---|
| 8. Opacity shall not exceed 20 percent.  | Rule 335-3-14-.04 (9)                           |
| 9. Pursuant to 40 CFR Part 63, Subpart MM, this unit's opacity shall not exceed 35 percent for 2 percent or more of the operating time when spent pulping liquor is fed within any semiannual period.  | Rule 335-3-11-.06 (38)                          |
| 10. Carbon monoxide emissions shall not exceed the more stringent of 300 parts per million by volume at 8% oxygen and 331.9 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 11. Volatile organic compound emissions shall not exceed the more stringent of 0.04 lb/MMBtu and 43.2 pounds per hour (as carbon).   | Rule 335-3-14-.04 (9)                           |
| 12. Sulfuric acid mist emissions shall not exceed 3.78 pounds per hour.  | Rule 335-3-14-.04 (9)                           |
| 13. Pursuant to 40 CFR Part 63, Subpart MM, as a surrogate for HAPs, the particulate matter emissions from this unit shall not exceed 0.044 grains per DSCF at 8% oxygen.  | Rule 335-3-11-.06 (38)                          |
| <b>Compliance and Performance Test Methods and Procedures</b>  |   |
| 1. Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or 17.   | Rule 335-3-10-.03 (1)                           |
| 2. Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60 Method 16, 16A or 16B.  | Rule 335-3-10-.02 (28)<br>Rule 335-3-10-.03 (1) |
| 3. Compliance with the sulfur dioxide emission limit shall be determined in accordance with the 40 CFR Part 60 Method 6, 6A or 6C.   | Rule 335-3-10-.03 (1)                           |
| 4. Compliance with the nitrogen oxide emission limit shall be determined in accordance with the 40 CFR Part 60 Method 7 or 7E or by the NOx CEMs.  | Rule 335-3-10-.03 (1)<br>Rule 335-3-16-.05      |
| 5. Compliance with the opacity limit shall be determined in accordance with 40 CFR Part 60 Appendix A Method 9 or continuous opacity monitoring system.  | Rule 335-3-10-.03 (1)                           |
| 6. Compliance with the carbon monoxide emission limit shall be determined in accordance with the 40 CFR Part 60 Method 10.   | Rule 335-3-10-.03 (1)                           |
| 7. Compliance with the volatile organic compound emission limit shall be determined in accordance with the 40 CFR Part 60 Method 18, 25, 25A or 25B.   | Rule 335-3-10-.03 (1)                           |
| 8. The fuel oil sulfur content shall be measured in accordance with fuel oil sampling and analysis procedures in the appropriate ASTM method.  | Rule 335-3-1-.04 (2)(e)                         |
| 9. Compliance with the sulfuric acid mists emission limit shall be determined in accordance with the 40 CFR Part 60 Method 8, 13, 13A, or 13B.   | Rule 335-3-10-.03 (1)                           |
| <b>Emission Monitoring</b>   |   |
| 1. A particulate matter emissions test shall be performed at least once per year.  | Rule 335-3-16-.05                               |
| 2. For particulate matter and opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent when spent pulping liquor is being fed, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. | Rule 335-3-16-.05                               |

## No. 3 Recovery Furnace Provisos

| Federally Enforceable Provisos   | Regulations  |
|--|--|
| 3. For particulate matter, sulfur dioxide, carbon monoxide, volatile organic compound, and sulfuric acid mists periodic monitoring, if any three-hour block average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. | Rule 335-3-16-.05  |
| 4. A continuous emission monitoring system for the measurement of total reduced sulfur, oxygen, nitrogen oxides, and opacity shall be installed, calibrated, operated and maintained.  | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-10-.02 (28)<br>Rule 335-3-11-.06 (38) |
| 5. A sulfur dioxide emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.   | Rule 335-3-16-.05  |
| 6. For sulfur dioxide periodic monitoring, obtain fuel oil receipts from the suppliers that certify sulfur content in fuel for every load received by the mill.  | Rule 335-3-10-.02 (2)(b)   |
| 7. Pursuant to 40 CFR Part 63, Subpart MM, the Continuous Opacity Monitoring System shall meet the provisions of Performance Specification 1 in appendix B to 40 CFR Part 60, as well as 40 CFR 63.6(h), 63.8, and 63.864(d)(3) and (4).   | Rule 335-3-11-.06 (38)   |
| 8. A carbon monoxide emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.  | Rule 335-3-16-.05  |
| 9. A volatile organic compound emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.  | Rule 335-3-16-.05  |
| 10. A sulfuric acid mists emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.   | Rule 335-3-16-.05  |
| 11. For compliance with 40 CFR 63 Subpart MM, a periodic particulate matter performance test shall be performed pursuant to 40 CFR 63.865 every 5 years. Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.  | Rule 335-3-11-.06 (38)   |
| 12. The facility must maintain proper operation of the ESP's automatic voltage control (AVC).  | Rule 335-3-11-.06 (38)   |
| 13. As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.  | Rule 335-3-11-.06 (38)   |
| <b>Recordkeeping and Reporting Requirements</b>  |  |
| 1. A particulate matter emissions test report shall be submitted to the Department at least once per year.   | Rule 335-3-16-.05  |
| 2. Records of all six-minute average opacities shall be made and maintained on file available for inspection for a period of five years.   | Rule 335-3-16-.05  |
| 3. Records of all three-hour block average liquor-firing rates shall be made and maintained on file available for inspection for at least five years   | Rule 335-3-16-.05  |

## No. 3 Recovery Furnace Provisos

| Federally Enforceable Provisos   | Regulations              |
|--|--------------------------|
| 4. A sulfur dioxide emissions test report shall be submitted to the Department at least every five years.  | Rule 335-3-16-.05        |
| 5. A carbon monoxide emissions test report shall be submitted to the Department at least every five years.   | Rule 335-3-16-.05        |
| 6. A volatile organic compound emissions test report shall be submitted to the Department at least every five years.   | Rule 335-3-16-.05        |
| 7. A sulfuric acid mist emissions test report shall be submitted to the Department at least every five years.  | Rule 335-3-16-.05        |
| 8. Records of the amount of fossil fuel fired shall be made and the annual capacity factor calculated for each calendar year and maintained on file available for review for at least five years.  | Rule 335-3-10-.02 (2)(b) |
| 9. Fuel receipts from the fuel oil supplier that certify sulfur content in fuel for every load received by the mill shall be maintained on site available for inspection for at least five years.  | Rule 335-3-10-.02 (2)(b) |
| 10. A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information: <ul style="list-style-type: none"> <li>a. The magnitude of excess emissions greater than 5 parts per million adjusted to 8 percent oxygen computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).</li> <li>b. The date and time of commencement and completion of each time period of excess emissions.</li> <li>c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.</li> <li>d. The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.</li> <li>e. When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.</li> </ul> | Rule 335-3-10-.02 (28)   |
| 11. The nitrogen oxides continuous emissions monitoring system audit report shall be submitted to the Department within thirty days of the end of each calendar quarter.   | Rule 335-3-10-.02 (2)(b) |

## No. 3 Recovery Furnace Provisos

### Federally Enforceable Provisos

### Regulations

12. A report of excess nitrogen oxide emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports shall include the following information:
- a. The magnitude of excess emissions greater than 110 parts per million adjusted to 8 percent oxygen computed from three-hour rolling averages (data recorded during periods of monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).
  - b. The date and time of commencement and completion of each time period of excess emissions.
  - c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.
  - d. The date and time identifying each period during which the nitrogen oxide emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.
  - e. When no excess emissions have occurred and the nitrogen oxide emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.

Rule 335-3-16-.05

13. A written report of the excess opacity emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:
- a. The magnitude of excess emissions greater than 20 percent, computed from six-minute averages (data recorded during periods of monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).
  - b. The date and time of commencement and completion of each time period of excess emissions.
  - c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.
  - d. The date and time identifying each period during which the monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.

Rule 335-3-16-.05

When no excess emissions have occurred and the monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.



## No. 3 Recovery Furnace Provisos

### Federally Enforceable Provisos

### Regulations

|   |                               |
|---|-------------------------------|
| <p>14. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of any occurrence when corrective action is required when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when a violation is noted when opacity is greater than 35 percent for 2 percent or more of the operating time within any semiannual period.</p> <p>For each failure to meet the opacity standard, the date, start time, and duration of each failure must be recorded, along with the actions taken to minimize emissions, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.</p> <p>The facility must also maintain sufficient information to estimate the quantity of each Subpart MM regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.</p>  | <p>Rule 335-3-11-.06 (38)</p> |
| <p>15. Pursuant to 40 CFR Part 63, Subpart MM the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in 40 CFR 63.10 (c), including the number and duration of occurrences when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when the opacity is greater than 35 percent for 2 percent or more of the operating time within any semiannual period.</p> <p>If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to 40 CFR 63.864(k)(2) occurred, information from both the Summary Report and the Excess Emissions Report must be submitted.</p> <p>Excess Emissions and Summary Reports must be reported electronically via CEDRI per 40 CFR 63.867(d)(2).</p> | <p>Rule 335-3-11-.06 (38)</p> |
| <p>16. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of the black liquor firing rates in terms of tons/day or Mg/day.</p>   | <p>Rule 335-3-11-.06 (38)</p> |
| <p>17. Records and supporting documentation shall be kept for the compliance determinations, operating ranges, and parameter ranges established for this unit for at least five years.</p>  | <p>Rule 335-3-16-.05</p>      |
| <p>18. The facility must maintain records demonstrating compliance with the requirement in 40 CFR 63.864(e)(1) to maintain proper operation of an ESP's AVC.</p>  | <p>Rule 335-3-11-.06 (38)</p> |

## No. 3 Smelt Dissolving Tank Informational Summary

**Description:** No. 3 Smelt Tank

**Emission Unit No:** 023

**Installation Date:** 1992                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 193,000 lb/hr BLS dry basis

**Operating Schedule:** 8760 hours/year

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

**40 CFR Part 60 Subpart BB**

**40 CFR Part 63 Subpart MM**

### Pollutants Emitted

| Emission Point | Point Description           | Pollutant       | Emission Limit   | Standard  |
|----------------|-----------------------------|-----------------|--|---|
| X023           | No. 3 Smelt Dissolving Tank | PM              | $\leq 0.12$ lb/ton BLS (dry basis) and $\leq 8.3$ lb/hr                    | Rule 335-3-14-.04 (9)                           |
| X023           | No. 3 Smelt Dissolving Tank | TRS             | $\leq 0.033$ lb/ton BLS and $\leq 2.3$ lb/hr                               | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| X023           | No. 3 Smelt Dissolving Tank | SO <sub>2</sub> | $\leq 5$ lb/hr   | Rule 335-3-14-.04 (9)                           |
| X023           | No. 3 Smelt Dissolving Tank | Opacity         | $\leq 20\%$ with one six-minute period up to $40\%$ in any one hour period | Rule 335-3-4-.01                                |
| X023           | No. 3 Smelt Dissolving Tank | HAPs            | PM as a surrogate for HAPs, $\leq 0.20$ lbs/ton of BLS                     | Rule 335-3-11-.06(38)                           |

## No. 3 Smelt Dissolving Tank Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>                              |
|---|---|
| <b>Applicability</b>  |   |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03                               |
| 2. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02(1) and (28) New Source Performance Standards Subpart BB for kraft pulp mills.  | Rule 335-3-10-.02 (1) and (28)                  |
| 3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-14-.04(9) Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits for particulate matter, total reduced sulfur, and sulfur dioxide.                               | Rule 335-3-14-.04 (9)                           |
| 4. This source is subject to the requirements of ADEM Admin. Code R. 335-3-4-.01 for opacity.   | Rule 335-3-4-.01                                |
| 5. This source is subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM as referenced in ADEM Admin. Code R. 335-3-11-.06(38).  | Rule 335-3-11-.06 (1) and (38)                  |
| <b>Emission Standards</b>   |   |
| 1. Particulate matter emissions shall not exceed the more stringent of 0.12 pounds per ton of black liquor solids (dry basis) and 8.3 pounds per hour.  | Rule 335-3-14-.04 (9)                           |
| 2. Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids and 2.3 pounds per hour.   | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| 3. Sulfur dioxide emissions shall be no greater than 5 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 4. Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent. | Rule 335-3-4-.01                                |
| 5. In accordance with 40 CFR Part 63 Subpart MM, particulate matter emissions, as a surrogate for HAPs, shall not exceed 0.20 pounds per ton of black liquor solids fired.  | Rule 335-11-.06 (38)                            |
| <b>Compliance and Performance Test Methods and Procedures</b>   |   |
| 1. Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or 17.  | Rule 335-3-10-.03 (1)                           |
| 2. Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60 Method 16, 16A or 16B.   | Rule 335-3-10-.02 (28)<br>Rule 335-3-10-.03 (1) |
| 3. Compliance with the sulfur dioxide emission limit shall be determined in accordance with 40 CFR Part 60 Method 6, 6a, or 6c.   | Rule 335-3-10-.03 (1)                           |
| 4. Compliance with the opacity limit shall be determined in accordance with the 40 CFR Part 60 Method 9.  | Rule 335-3-4-.01<br>Rule 335-3-10-.03 (1)       |
| <b>Emission Monitoring</b>  |   |
| 1. A particulate matter emissions test shall be performed at least once per year.   | Rule 335-3-16-.05                               |

## No. 3 Smelt Dissolving Tank Provisos

| Federally Enforceable Provisos   | Regulations            |
|--|------------------------|
| 2. A total reduced sulfur emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.   | Rule 335-3-16-.05      |
| 3. A sulfur dioxide emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters.   | Rule 335-3-16-.05      |
| 4. For particulate matter, total reduced sulfur, and sulfur dioxide periodic monitoring, if any three-hour block average liquor firing rate is greater than 110 percent of its value set by the required complying periodic test or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate.  | Rule 335-3-16-.05      |
| 5. For particulate matter, total reduced sulfur, and sulfur dioxide periodic monitoring, if any three-hour block average wet scrubber liquid supply flow rate to the fan is less than 90 percent of its respective average value set by the required complying periodic test or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours.  | Rule 335-3-16-.05      |
| 6. Pursuant to 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber total liquid supply flow rate (combined flow to the fan and lower zone spray nozzles) and the fan rpm during times when spent pulping liquor is fed. Fan amperage may be used, if fan rpm is not available. The parametric monitoring system shall meet the requirements listed in 40 CFR 63.8(c).<br>Monitoring of the flow rate and fan rpm is an approved alternative to the requirements listed in 40 CFR 63.864(e)(10).<br>This unit shall not have 6 or more 3-hour average parameter values within any 6-month reporting period that are below the minimum operating limits established in accordance with 40 CFR 63.864(j) during times when spent pulping liquor is fed, with the exception of wet scrubber total liquid supply flow rate during periods of startup and shutdown.<br>No more than one exceedance will be attributed in any given 24-hour period. | Rule 335-3-11-.06 (38) |
| 7. Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.  | Rule 335-3-16-.05      |
| 8. Pursuant to 40 CFR 63.865, a periodic particulate matter performance test shall be performed, pursuant to 40 CFR 63.865, every 5 years.<br><br>Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.   | Rule 335-3-11-.06 (38) |
| 9. As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.   | Rule 335-3-11-.06 (38) |
| <b>Recordkeeping and Reporting Requirements</b>  |                        |
| 1. A particulate matter emissions test report shall be submitted to the Department at least once per year.   | Rule 335-3-16-.05      |
| 2. Records of all three-hour block average liquor firing rates shall be made and maintained on file available for inspection for at least five years.  | Rule 335-3-16-.05      |

## No. 3 Smelt Dissolving Tank Provisos

| Federally Enforceable Provisos   | Regulations            |
|--|------------------------|
| 3. Records of all three-hour block average wet scrubber liquid supply flow rates, weak wash flow rate (if different), and fan rpm shall be made and maintained on file available for inspection for at least five years.   | Rule 335-3-16-.05      |
| 4. Records of the fan motor rpm shall be made and maintained on file available for inspection for at least five years.   | Rule 335-3-16-.05      |
| 5. A sulfur dioxide emissions test report shall be submitted to the Department at least once every five years.   | Rule 335-3-16-.05      |
| 6. A total reduced sulfur emissions test report shall be submitted to the Department at least once every five years.   | Rule 335-3-16-.05      |
| 7. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of any occurrence when corrective action is required (when a 3-hour average flow rate or rpm value is below the minimum operating limit established according to 40 CFR 63.864(j) during times when spent pulping liquor is fed, with the exception of wet scrubber total liquid supply flow rate during periods of startup and shutdown), and when a violation is noted (when six or more 3-hour average flow rate or rpm values within any 6-month reporting period are below the minimum operating limits established in accordance with 40 CFR 63.864(k) during times when spent pulping liquor is fed, with the exception of wet scrubber total liquid supply flow rate during periods of startup and shutdown.).  | Rule 335-3-11-.06 (38) |
| 8. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of parametric monitoring data required under 40 CFR 63.864, including any period when the 3-hour average flow rate or rpm value, during times when spent pulping liquor is fed, were inconsistent with the levels established during the initial or subsequent performance tests, with a brief explanation of the cause of the deviation, the time the deviation occurred, and the time corrective action was initiated and completed, and corrective action taken. The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit for each failure to meet an operating limit. The information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.<br><br>The facility must also maintain records and documentation of supporting calculations for compliance determinations made under 40 CFR 63.865(a) through (d).<br><br>The facility must also maintain the records of the monitoring parameter ranges for the fan rpm's and scrubber flow rates. | Rule 335-3-11-.06 (38) |

## No. 3 Smelt Dissolving Tank Provisos

### Federally Enforceable Provisos

### Regulations

9. Pursuant to 40 CFR Part 63, Subpart MM the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in 40 CFR 63.867 (c), including the number and duration of three hour averages when the flow rate or rpm's were below the minimum operating limit during times when spent pulping liquor is fed. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to 40 CFR 63.864(k)(2) occurred, information from both the Summary Report and Excess Emissions Report must be submitted.

Excess Emissions and Summary Reports must be reported electronically via CEDRI per 40 CFR 63.867(d)(2).

Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.

Rule 335-3-11-.06 (38)

## No. 4 Power Boiler Informational Summary

**Description:** No. 4 Power Boiler

**Emission Unit No:** 033

**Installation Date:** 2016                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 550.58 MMBtu/hr

**Operating Schedule:** 8760 hours/year

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                                      |
|----------------|--------------------|-------------------|--|---|
| X033           | No. 4 Power Boiler | Filterable PM     | ≤ 0.0074 lb/MMBtu  | Rule 335-3-11-.06 (107)                       |
| X033           | No. 4 Power Boiler | PM <sub>10</sub>  | ≤ 0.024 lb/MMBtu   | Rule 335-3-14-.04                             |
| X033           | No. 4 Power Boiler | PM <sub>2.5</sub> | ≤ 0.023 lb/MMBtu   | Rule 335-3-14-.04                             |
| X033           | No. 4 Power Boiler | NO <sub>x</sub>   | ≤ 0.20 lb/MMBtu (30-day rolling average)<br>≤ 342.5 tons/12 month rolling period, combined from this unit and No. 5 Power Boiler | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-14-.04 |
| X033           | No. 4 Power Boiler | SO <sub>2</sub>   | ≤ 332 tons/12-month rolling period, combined from this unit and No. 5 Power Boiler   | Rule 335-3-14-.04                             |
| X033           | No. 4 Power Boiler | CO                | ≤ 310 ppmv corrected to 3% O <sub>2</sub> (30 day rolling average)   | Rule 335-3-11-.06 (107)                       |
| X033           | No. 4 Power Boiler | CO <sub>2e</sub>  | ≤ 194,619 tons/12-month rolling period, combined from this unit and No. 5 Power Boiler   | Rule 335-3-14-.04                             |
| X033           | No. 4 Power Boiler | Opacity           | ≤ 20 percent with one six-minute period up to 27 percent in any one hour period  | Rule 335-3-10-.02 (2)(b)                      |
| X033           | No. 4 Power Boiler | Opacity           | ≤ 10 percent (daily block average)   | Rule 335-3-11-.06 (107)                       |
| X033           | No. 4 Power Boiler | HCl               | ≤ 0.020 lb/MMBtu   | Rule 335-3-11-.06 (107)                       |
| X033           | No. 4 Power Boiler | Mercury           | ≤ 5.4 x 10 <sup>-6</sup> lb/MMBtu  | Rule 335-3-11-.06 (107)                       |

### Permitted Fuels

| Fuel        | Max % Sulfur  | Max % Ash |
|-------------|---------------|-----------|
| Biomass     | 0.32 lb/MMBtu | 8.0       |
| Natural Gas | N/A           | N/A       |

## No. 4 Power Boiler Provisos

| Federally Enforceable Provisos  | Regulations                      |
|---|----------------------------------|
| <b>Applicability</b>  |                                  |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03                |
| 2. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02(1) and (2) (b), 40 CFR 60 Subpart Db for nitrogen oxides, and opacity  | Rule 335-3-10-.02 (1) and (2)(b) |
| 3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-14-.04 Prevention of Significant Deterioration (PSD) synthetic minor limits for PM <sub>10</sub> , PM <sub>2.5</sub> , nitrogen oxides, sulfur dioxide, and carbon dioxide equivalent.  | Rule 335-3-14-.04                |
| 4. This source is subject to the applicable 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 as an existing fluidized bed unit designed to burn biomass with a continuous oxygen trim system that maintains and optimum air to fuel ratio. | Rule 335-3-11-.06 (1) and (107)  |
| <b>Emission Standards</b>   |                                  |
| 1. This boiler shall only be fired with biomass and natural gas. Biomass is defined as bark, chip thickness screening fines, wastewater treatment plant residuals, and pulp mill knots. This boiler may also function as the control device for the HVLC and the LVHC NCGs.   | Rule 335-3-14-.04                |
| 2. Nitrogen oxide emissions shall not exceed 0.20 pounds per million Btu heat input (30-day rolling average).   | Rule 335-3-10-.02 (2)(b)         |
| 3. The combined annual nitrogen oxide emissions from this unit and from the No. 5 Power Boiler shall not exceed 342.5 tons per 12 month rolling period. Using data from the CEMS, the facility will calculate emissions on a tons-per-month basis. These emission numbers shall be used to calculate a 12-month rolling total.  | Rule 335-3-14-.04                |
| 4. The combined annual sulfur dioxide emissions from this unit and from the No. 5 Power Boiler shall not exceed 332 tons per 12 month rolling period. Using data from the CEMS, the facility will calculate emissions on a tons-per-month basis. These emission numbers shall be used to calculate a 12-month rolling total.  | Rule 335-3-14-.04                |
| 5. CO <sub>2e</sub> emissions excluding biogenic CO <sub>2</sub> from the No. 4 and No. 5 Powers combined shall not exceed 194,619 tons/year (12-month rolling total).  | Rule 335-3-14-.04                |
| 6. Opacity shall not be greater than 20 percent except for one six-minute period per hour of not more than 27 percent.  | Rule 335-3-10-.02 (2)            |
| 7. Opacity shall not be greater than 10 percent (daily block average).  | Rule 335-3-11-.06 (107)          |
| 8. No more than 3,129 MMSCF of natural gas may be fired in the No. 4 and No. 5 Power Boilers combined during any 12-month period.   | Rule 335-3-14-.04                |
| 9. Filterable particulate matter emissions shall not exceed 0.0074 pounds per million Btu.  | Rule 335-3-11-.06 (107)          |
| 10. Total PM <sub>10</sub> emissions shall not exceed 0.024 pounds per million Btu.   | Rule 335-3-14-.04                |
| 11. Total PM <sub>2.5</sub> emissions shall not exceed 0.023 pounds per million Btu.  | Rule 335-3-14-.04                |



## No. 4 Power Boiler Provisos

| Federally Enforceable Provisos   | Regulations                                   |
|--|---|
| 12. Carbon monoxide emissions shall not exceed 310 ppmv (dry basis) corrected to 3% oxygen (30-day rolling average).   | Rule 335-3-11-.06 (107)                       |
| 13. Hydrogen Chloride emissions shall not exceed 0.020 pounds per million Btu.   | Rule 335-3-11-.06 (107)                       |
| 14. Mercury emissions shall not exceed $5.4 \times 10^{-6}$ pounds per million Btu.  | Rule 335-3-11-.06 (107)                       |
| 15. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.  | Rule 335-3-11-.06 (107)                       |
| 16. The standards of §63.7500 apply at all times the unit is operating, except during periods of startup and shutdown during which time you must comply only with items 5 and 6 of Table 3 of 40 CFR Part 63 Subpart DDDDD.  | Rule 335-3-11-.06 (107)                       |
| <b>Compliance and Performance Test Methods and Procedures</b>  |   |
| 1. Compliance with the PM emission limit shall be determined by Reference Method 5 or 17 in Appendix A of 40 CFR 60. For compliance with 40 CFR 63 Subpart DDDDD, the facility must follow the procedures of 63.7520 and Tables 5 and 7 of Subpart DDDDD.  | Rule 335-3-11-.06 (107)                       |
| 2. Compliance with the PM <sub>2.5</sub> and PM <sub>10</sub> emission limit shall be determined by EPA Test Method 201A and/or EPA Test Method 202.   | Rule 335-3-10-.03 (1)                         |
| 3. Compliance with the sulfur dioxide (SO <sub>2</sub> ) emission limit shall be determined in accordance with the continuous emission monitoring system.  | Rule 335-3-14-.04                             |
| 4. Compliance with the nitrogen oxide (NO <sub>x</sub> ) emission limit shall be determined in accordance with the continuous emission monitoring system.  | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |
| 5. Compliance with the carbon monoxide (CO) limit shall be determined in accordance with the continuous emission monitoring system.  | Rule 335-3-11-.06 (107)                       |
| 6. Compliance with the hydrogen chloride (HCl) limit shall be determined by EPA Test Method 26 or 26A. For compliance with 40 CFR 63 Subpart DDDDD, the facility must follow the procedures of 63.7520 and Tables 5 and 7 of Subpart DDDDD.  | Rule 335-3-11-.06 (107)                       |
| 7. Compliance with the mercury (Hg) limit shall be determined by EPA Test Method 29, 30A, or 30B of 40 CFR Part 60 Appendix A, or Method 101A of 40 CFR Part 61 Appendix B. For compliance with 40 CFR 63 Subpart DDDDD, the facility must follow the procedures of 63.7520 and Tables 5 and 7 of Subpart DDDDD. | Rule 335-3-11-.06 (107)                       |
| 8. Compliance with the opacity limit shall be determined by 40 CFR Part 60 Appendix A Method 9 or the continuous opacity monitoring system.  | Rule 335-3-10-.02 (2)(b)                      |
| <b>Emission Monitoring</b>   |   |
| 1. A Continuous Emissions Monitoring System (CEMs) for measuring sulfur dioxide (SO <sub>2</sub> ) shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F.   | Rule 335-3-14-.04                             |
| 2. A Continuous Emissions Monitoring System (CEMs) for measuring nitrogen oxides (NO <sub>x</sub> ) shall be installed, calibrated, operated, and maintained in accordance with 40 CFR 60, Subpart Db, §60.48b. This continuous emission   | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |

## No. 4 Power Boiler Provisos

| Federally Enforceable Provisos   | Regulations   |
|--|---|
| monitoring system shall be subject to the quality control and quality assurance requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F.  |   |
| 3. Pursuant to 40 CFR 63.7525, a Continuous Emissions Monitoring System (CEMs) for measuring carbon monoxide (CO) shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 4, 4A, or 4B, and Appendix F.  | Rule 335-3-11-.06 (107)                             |
| 4. A Continuous Opacity Monitoring System (COMs) which meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 shall be installed, operated, calibrated, and maintained to record the opacity discharged from the unit.  | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-11-.06 (107) |
| 5. Equation 19-1 from 40 CFR 60, Appendix A, Method 19 shall be used to calculate 1-hour NO <sub>x</sub> and SO <sub>2</sub> lb/MMbtu emission rates. This emission rate shall be multiplied by the boilers heat input as derived from the boiler steam flow meter to determine the 1-hour NO <sub>x</sub> and SO <sub>2</sub> emissions, which shall be summed each day. This steam flow to heat input table shall be verified annually during the yearly emissions testing conducted on this boiler. Daily emissions will be summed each month to obtain the monthly total. Individual monthly totals will be summed together to obtain the tons per 12-month emitted. | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-14-.04       |
| 6. When used to demonstrate compliance with the mercury or hydrogen chloride emission limits, the carbon and sorbent injection rate shall be monitored and recorded and the minimum injection value shall be set by a Department approved emissions test.  | Rule 335-3-11-.06 (107)                             |
| 7. The quantity and heat input of fuels fired shall be monitored.  | Rule 335-3-16-.05                                   |
| 8. Six-minute average opacities will be continuously recorded while the unit is in operation.  | Rule 335-3-16-.05                                   |
| 9. A particulate matter (PM) emissions test shall be performed at least once per year.   | Rule 335-3-16-.05                                   |
| 10. For opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent the cause is to be investigated and appropriate corrective action is to be taken.  | Rule 335-3-16-.05                                   |
| 11. The sulfur dioxide continuous emissions monitoring system shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.  | Rule 335-3-16-.05                                   |
| 12. The nitrogen oxides continuous emissions monitoring system shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.   | Rule 335-3-16-.05                                   |
| 13. Performance tests for particulate matter, hydrogen chloride, and mercury shall be performed annually within 13 months of the previous test. If performance tests for at least 2 consecutive years show that the respective emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the boiler or air pollution control equipment that  | Rule 335-3-11-.06 (107)                             |

## No. 4 Power Boiler Provisos

| Federally Enforceable Provisos  | Regulations                                   |
|---|---|
| could increase emissions, performance tests may be conducted for the specific pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.  |   |
| 14. Pursuant to 40 CFR 63 Subpart DDDDD the permittee shall maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the particulate matter emission limitation (daily block average). If the operating limit exceedance is indicated, corrective action is to be taken within twenty-four hours.  | Rule 335-3-11-.06 (107)                       |
| 15. Pursuant to §63.7500(a)(2) and Table 4, The facility shall maintain the 30-day rolling average operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test.   | Rule 335-3-11-.06 (107)                       |
| 16. When used to demonstrate compliance with the mercury or hydrogen chloride emission limits, pursuant to 40 CFR 63 Subpart DDDDD the permittee shall maintain the 30-day rolling average carbon or sorbent injection rate above the minimum hourly average as defined in 63.7575.   | Rule 335-3-11-.06 (107)                       |
| 17. The facility must demonstrate continuous compliance with each applicable emission limit, work practice standard, and operating limit of 40 CFR 63 Subpart DDDDD according to §63.7540(a) and Table 8.   | Rule 335-3-11-.06 (107)                       |
| 18. Pursuant to 40 CFR 63.7540(a)(12), boilers with a continuous oxygen trim system that maintains an optimum air to fuel ratio, must conduct a tune-up of the boiler every 5 years as specified in 63.7540(a)(10)(i) – (vi). Each tune-up must be completed no more than 61 months after the previous tune-up  | Rule 335-3-11-.06 (107)                       |
| <b>Recordkeeping and Reporting Requirements</b>   |   |
| 1. A report of excess opacity emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The report will include the following information: <ul style="list-style-type: none"> <li>a. The magnitude of emissions 20 percent and greater computed on a six-minute average (data recorded during periods of opacity monitor breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).</li> <li>b. The date and time of commencement and completion of each time period of excess emissions.</li> <li>c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.</li> <li>d. The date and time identifying each period during which the opacity monitor was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.</li> <li>e. When no excess emissions have occurred and the opacity monitor was not inoperative or did not require repairs or adjustments, such information will be stated in the report.</li> </ul> | Rule 335-3-10-.02 (b)                         |
| 2. A written report of excess SO <sub>2</sub> and NO <sub>x</sub> emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:   | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |

## No. 4 Power Boiler Provisos

| Federally Enforceable Provisos  | Regulations             |
|---|-------------------------|
| <ul style="list-style-type: none"> <li>a. The magnitude of excess NO<sub>x</sub> emissions over 0.20 lb/MMBTU computed from 3-hour rolling averages.</li> <li>b. The information as found in 40 CFR 40 CFR 60.49b(g) for itemized lists of NO<sub>x</sub> information to be submitted.</li> <li>c. The magnitude of excess NO<sub>x</sub> emissions over 342.5 tons/12 month rolling period combined with the No. 5 Power Boiler.</li> <li>d. The magnitude of excess SO<sub>2</sub> emissions over 332 tons/12 month rolling period combined with the No. 5 Power Boiler.</li> </ul> |                         |
| 3. A record of the 12-month rolling greenhouse gas emissions from the No. 4 and No. 5 Power Boilers must be made and maintained in a form suitable for inspection for at least five years.  | Rule 335-3-16-.05       |
| 4. A record of all six-minute average opacities will be made and maintained in a form suitable for inspection for at least five years.  | Rule 335-3-16-.05       |
| 5. A record of the daily block average opacity shall be made and maintained on the file available for inspection for at least five years. If an emission limit exceedance is indicated, make a note in the records and make a note of the corrective action that was taken.   | Rule 335-3-11-.06 (107) |
| 6. Pursuant to 40 CFR 63.7555, records of the monthly fuel use must be made and maintained in a form suitable for inspection for at least five years.   | Rule 335-3-11-.06 (107) |
| 7. A site-specific monitoring plan shall be developed in accordance with 40 CFR Part 63.7505(d), kept on file, and be readily available for review.   | Rule 335-3-11-.06 (107) |
| 8. This source shall maintain all applicable records required under 40 CFR 63.7555. Records must be readily available for review according to 63.10(b)(1) for a period of five years.   | Rule 335-3-11-.06 (107) |
| 9. This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.   | Rule 335-3-11-.06 (107) |
| 10. The nitrogen oxide and sulfur dioxide monitors shall be subject to the reporting and recordkeeping requirements of 40 CFR Part 60, Appendix F.  | Rule 335-3-16-.05       |
| 11. A particulate matter (PM) emissions test report shall be submitted to the Department at least once per year.  | Rule 335-3-16-05        |
| 12. When used to demonstrate compliance with the mercury or hydrogen chloride emission limits, a record of the 30-day rolling average sorbent or carbon injection rate shall be made and maintained on file available for inspection for at least five years. If an emission limit exceedance is indicated, make a note in the records and make a note of the corrective action that was taken.   | Rule 335-3-11-.06 (107) |
| 13. A record of the 30-day rolling average steaming rate shall be made and maintained on file available for inspection for at least five years. If an emission limit exceedance is indicated, make a note in the records and make a note of the corrective action that was taken.   | Rule 335-3-11-.06 (107) |
| 14. A record of the 30-day rolling average carbon monoxide emissions in parts per million shall be made and maintained on file available for inspection for at least five years. If an emission limit exceedance is indicated, make a note in the records and make a note of the corrective action that was taken.  | Rule 335-3-11-.06 (107) |
| 15. Pursuant to 40 CFR 63.7555, records of fuel analyses shall be made and maintained on file available for inspection for at least five years.   | Rule 335-3-11-.06 (107) |

**No. 4 Power Boiler  
Provisos**

| <b>Federally Enforceable Provisos</b>  | <b>Regulations</b>      |
|--|-------------------------|
| 16. Pursuant to §63.7515(f), the facility must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. The report must verify the operating limits for each boiler have not changed or provide documentation of revised operating limits according to §63.7530 and Table 7. | Rule 335-3-11-.06 (107) |
| 17. When conducting a performance test under 40 CFR §63 Subpart DDDDD, the facility must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.   | Rule 335-3-11-.06 (107) |

## No. 5 Power Boiler Informational Summary

**Description:** No. 5 Power Boiler

**Emission Unit No:** 034

**Installation Date:** 2015                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 270 MMBtu/hr

**Operating Schedule:** 8760 hours/year

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                                      |
|----------------|--------------------|-------------------|--|---|
| X034           | No. 5 Power Boiler | NO <sub>x</sub>   | ≤ 0.20 lb/MMBtu (30-day rolling average)<br>≤ 342.5 tons/12 month rolling period, combined from this unit and No. 4 Power Boiler | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-14-.04 |
| X034           | No. 5 Power Boiler | SO <sub>2</sub>   | ≤ 332 tons/12-month rolling period, combined from this unit and No. 4 Power Boiler   | Rule 335-3-14-.04                             |
| X034           | No. 5 Power Boiler | CO <sub>2</sub> e | ≤ 194,619 tons/12-month rolling period, combined from this unit and No. 4 Power Boiler   | Rule 335-3-14-.04                             |
| X034           | No. 5 Power Boiler | Opacity           | ≤ 20 percent with one six-minute period up to 40 percent in any one-hour period  | Rule 335-3-4-.01                              |

### Permitted Fuels

| Fuel        | Max % Sulfur | Max % Ash |
|-------------|--------------|-----------|
| Natural Gas | N/A          | N/A       |

## No. 5 Power Boiler Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>                            |
|---|---|
| <b>Applicability</b>  |   |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03                             |
| 2. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02(1) and (2)(b), 40 CFR 60 Subpart Db for nitrogen oxides.   | Rule 335-3-10-.02 (1) and (2)(b)              |
| 3. This source is subject to the requirements of ADEM Admin. Code R. 335-3-4-.01 for opacity.   | Rule 335-3-4-.01                              |
| 4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-14-.04 Prevention of Significant Deterioration (PSD) synthetic minor limits for nitrogen oxides, sulfur dioxide, and carbon dioxide equivalent.   | Rule 335-3-14-.04                             |
| 5. This source is subject to the applicable 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, as an existing Gas 1 boiler with a continuous oxygen trim system that maintains and optimum air to fuel ratio. | Rule 335-3-11-.06 (1) and (107)               |
| <b>Emission Standards</b>   |   |
| 1. Nitrogen oxide emissions shall not exceed 0.20 pounds per million Btu heat input (30-day rolling average).   | Rule 335-3-10-.02 (2)(b)                      |
| 2. The combined annual nitrogen oxide emissions from this unit and from the No. 4 Power Boiler shall not exceed 342.5 tons per 12 month rolling period. Using data from the CEMS, the facility will calculate emissions on a tons-per-month basis. These emission numbers shall be used to calculate a 12-month rolling total.                              | Rule 335-3-14-.04                             |
| 3. The combined annual sulfur dioxide emissions from this unit and from the No. 4 Power Boiler shall not exceed 332 tons per 12 month rolling period. Using data from the CEMS, the facility will calculate emissions on a tons-per-month basis. These emission numbers shall be used to calculate a 12-month rolling total.                                | Rule 335-3-14-.04                             |
| 4. CO <sub>2e</sub> emissions excluding biogenic CO <sub>2</sub> from the No. 4 and No. 5 Powers combined shall not exceed 194,619 tons/year (12-month rolling total).  | Rule 335-3-14-.04                             |
| 5. Opacity shall not be greater than 20 percent except for one six-minute period per hour of not more than 40 percent.  | Rule 335-3-4-.01 (1)                          |
| 6. No more than 3,129 MMSCF of natural gas may be fired in the No. 4 and No. 5 Power Boilers combined during any 12-month period.   | Rule 335-3-14-.04                             |
| 7. This boiler shall only be fired with natural gas. This boiler may also function as the control device for the HVLC and the LVHC NCGs.  | Rule 335-3-14-.04                             |
| <b>Compliance and Performance Test Methods and Procedures</b>   |   |
| 1. Compliance with the sulfur dioxide (SO <sub>2</sub> ) emission limit shall be determined in accordance with the continuous emission monitoring system.   | Rule 335-3-16-.05                             |
| 2. Compliance with the nitrogen oxide (NO <sub>x</sub> ) emission limit shall be determined in accordance with the continuous emission monitoring system.   | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |

## No. 5 Power Boiler Provisos

| Federally Enforceable Provisos  | Regulations                                   |
|---|---|
| <p>3. Compliance with the opacity limit shall be determined by 40 CFR Part 60 Appendix A Method 9.</p>  | Rule 335-3-4-.01 (2)                          |
| <b>Emission Monitoring</b>  |   |
| <p>1. A Continuous Emissions Monitoring System (CEMs) for measuring sulfur dioxide (SO<sub>2</sub>) shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F.</p>   | Rule 335-3-16-.05                             |
| <p>2. A Continuous Emissions Monitoring System (CEMs) for measuring nitrogen oxides (NO<sub>x</sub>) shall be installed, calibrated, operated, and maintained in accordance with 40 CFR 60, Subpart Db, §60.48b. This continuous emission monitoring system shall be subject to the quality control and quality assurance requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F.</p> | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |
| <p>3. The sulfur dioxide continuous emissions monitoring system shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.</p>   | Rule 335-3-16-.05                             |
| <p>4. The nitrogen oxides continuous emissions monitoring system shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.</p>  | Rule 335-3-16-.05                             |
| <p>5. The quantity and heat input of fuels fired shall be monitored.</p>  | Rule 335-3-16-.05                             |
| <p>6. Pursuant to 40 CFR 63.7540(a)(12), boilers with a continuous oxygen trim system that maintains an optimum air to fuel ratio, must conduct a tune-up of the boiler every 5 years as specified in 63.7540(a)(10)(i) – (vi). Each tune-up must be completed no more than 61 months after the previous tune-up.</p>   | Rule 335-3-11-.06 (107)                       |
| <b>Recordkeeping and Reporting Requirements</b>   |   |
| <p>1. The nitrogen oxide and the sulfur dioxide monitors shall be subject to the reporting and recordkeeping requirements of 40 CFR Part 60, Appendix F.</p>  | Rule 335-3-16-.05                             |
| <p>2. A written report of excess SO<sub>2</sub> and NO<sub>x</sub> emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:</p>  | Rule 335-3-10-.02 (2)(b)<br>Rule 335-3-16-.05 |
| <p>a. The magnitude of excess NO<sub>x</sub> emissions over 0.20 lb/MMBTU computed from 30-day rolling averages.</p>  |   |
| <p>b. The information as found in 40 CFR 60.49b(g) for itemized lists of NO<sub>x</sub> information to be submitted.</p>  |   |
| <p>c. The magnitude of excess NO<sub>x</sub> emissions over 342.5 tons/12 month rolling period combined with the No. 4 Power Boiler.</p>  |   |
| <p>d. The magnitude of excess SO<sub>2</sub> emissions over 332 tons/12 month rolling period combined with the No. 4 Power Boiler.</p>  |   |



**No. 5 Power Boiler  
Provisos**

**Federally Enforceable Provisos**

**Regulations**

- | <b>Federally Enforceable Provisos</b>  | <b>Regulations</b>      |
|--|-------------------------|
| 3. A record of the 12-month rolling greenhouse gas emissions from the No. 4 and No. 5 Power Boilers must be made and maintained in a form suitable for inspection for at least five years. | Rule 335-3-16-.05       |
| 4. Pursuant to 40 CFR 63.7555, records of the monthly fuel use must be made and maintained in a form suitable for inspection for at least five years.                                      | Rule 335-3-11-.06 (107) |
| 5. This source shall maintain all applicable records required under 40 CFR 63.7555. Records must be readily available for review according to 63.10(b)(1) for a period of five years.      | Rule 335-3-11-.06 (107) |
| 6. This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.  | Rule 335-3-11-.06 (107) |

## No. 3 Lime Kiln Informational Summary

**Description:** No. 3 Lime Kiln

**Emission Unit No:** 026

**Installation Date:** 1995                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 54,167 lb/hr (as CaO)

**Operating Schedule:** 8760 hours/year

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

**40 CFR Part 60 Subpart BB**  
**40 CFR Part 63 Subpart MM**

### Pollutants Emitted

| Emission Point | Point Description | Pollutant                      | Emission Limit  | Standard  |
|----------------|-------------------|--------------------------------|---|---|
| X026           | No. 3 Lime Kiln   | Filterable PM (gas)            | ≤ 0.035 gr/dscf at 10% O <sub>2</sub> and/or ≤ 22 lbs/hr          | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | Filterable PM (oil)            | ≤ 0.064 gr/dscf at 10% O <sub>2</sub> and/or ≤ 42 lbs/hr          | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | TRS                            | ≤ 8 ppmdv at 10% O <sub>2</sub> and/or ≤ 3.1 lbs/hr               | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| X026           | No. 3 Lime Kiln   | SO <sub>2</sub>                | ≤ 44 ppmdv at 10% O <sub>2</sub> and/or ≤ 32.1 lbs/hr             | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | Opacity                        | ≤ 20% with one six-minute period up to 40% in any one-hour period | Rule 335-3-4-.01 (1)                            |
| X026           | No. 3 Lime Kiln   | Opacity                        | ≤ 20% for 3% or more of operating time in any semiannual period   | Rule 335-3-11-.06 (38)                          |
| X026           | No. 3 Lime Kiln   | NO <sub>x</sub>                | ≤ 175 ppmdv at 10% O <sub>2</sub> and/or ≤ 91.8 lbs/hr            | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | CO                             | ≤ 80 ppmdv at 10% O <sub>2</sub> and/or ≤ 25.5 lbs/hr             | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | VOC                            | ≤ 0.69 lb/ton as CaO and/or ≤ 18.8 lbs/hr as carbon               | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | H <sub>2</sub> SO <sub>4</sub> | ≤ 1.2 lbs/hr  | Rule 335-3-14-.04 (9)                           |
| X026           | No. 3 Lime Kiln   | HAPs                           | PM as a surrogate, ≤ 0.064 gr/dscf at 10% O <sub>2</sub>          | Rule 335-3-11-.06 (38)                          |

### Permitted Fuels

| Fuel           | Max % Sulfur | Max % Ash |
|----------------|--------------|-----------|
| No. 2 Fuel Oil | 0.5          | N/A       |
| No. 5 Fuel Oil | 3.2          | 0.15      |
| Natural Gas    | N/A          | N/A       |

## No. 3 Lime Kiln Provisos

| Federally Enforceable Provisos   | Regulations                                     |
|--|---|
| <b>Applicability</b>   |   |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".  | Rule 335-3-16-.03                               |
| 2. This source is subject to federal New Source Performance Standards 40 CFR 60 Subpart A and Subpart BB.  | Rule 335-3-10-.02 (1) and (28)                  |
| 3. This Source is subject to the requirements of ADEM Admin. Code R. 335-3-14-.04(9) Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits for filterable particulate matter, total reduced sulfur, sulfur dioxide, nitrogen oxide, carbon monoxide, volatile organic compounds, and sulfuric acid mist. | Rule 335-3-14-.04 (9)                           |
| 4. This source is subject to the requirements of ADEM Admin. Code R. 335-3-4-.01 (1) for opacity.  | Rule 335-3-4-.01 (1)                            |
| 5. This source is subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM.   | Rule 335-3-11-.06 (1) and (38)                  |
| <b>Emission Standards</b>  |   |
| 1. Filterable particulate matter shall not exceed the more stringent of 0.035 gr/sdcf at 10 percent oxygen and 22 pounds per hour when firing natural gas and shall not exceed the more stringent of 0.064 gr/sdcf at 10 percent oxygen and 42 pounds per hour when firing fuel oil.   | Rule 335-3-14-.04 (9)                           |
| 2. Total reduced sulfur shall not exceed the more stringent of 8 parts per million at 10 percent oxygen and 3.1 pounds per hour.   | Rule 335-3-10-.02 (28)<br>Rule 335-3-14-.04 (9) |
| 3. Sulfur dioxide emissions shall not exceed 44 parts per million at 10 percent oxygen and 32.1 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 4. Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.  | Rule 335-3-4-.01 (1)                            |
| 5. Nitrogen oxide emissions shall not exceed the more stringent of 175 parts per million volume at 10 percent oxygen and 91.8 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 6. Carbon monoxide emissions shall not exceed the more stringent of 80 parts per million volume at 10 percent oxygen and 25.5 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 7. Volatile organic compound emissions shall not exceed 0.69 pounds per ton as CaO and 18.8 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 8. Sulfuric acid mists emissions shall not exceed 1.2 pounds per hour.   | Rule 335-3-14-.04 (9)                           |
| 9. In accordance with 40 CFR Part 63 Subpart MM, particulate matter emissions, as a surrogate for HAPs, shall not exceed 0.064 gr/dscf corrected to 10 percent oxygen.   | Rule 335-3-11-.06 (38)                          |
| 10. In accordance with 40 CFR Part 63, Subpart MM, this unit's opacity shall not exceed 20 percent for 3 percent or more of the operating time within any semiannual period.   | Rule 335-3-11-.06 (38)                          |
| 11. When firing fuel oil, this unit shall only fire fuel oil that contains no more than 3.2 sulfur by weight.  | Rule 335-3-14-.04 (9)                           |

## No. 3 Lime Kiln Provisos

### Federally Enforceable Provisos

### Regulations

#### Compliance and Performance Test Methods and Procedures

- |  |   |
|--|---|
| 1. Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Appendix A Method 5 or 17.  | Rule 335-3-10-.02 (28)<br>Rule 335-3-10-.03 (1)<br>Rule 335-3-11-.06 (38) |
| 2. Compliance with the opacity limit shall be determined in accordance with the 40 CFR 60 Appendix A Method 9 or continuous opacity monitoring system.                                       | Rule 335-3-4-.01  |
| 3. Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60 Appendix A Method 16, 16A or 16B or continuous emissions monitoring system. | Rule 335-3-10-.02 (28)  |
| 4. Compliance with the sulfur dioxide emission limit shall be determined in accordance with the 40 CFR Part 60 Appendix A Method 6, 6A or 6C.  | Rule 335-3-10-.03 (1)   |
| 5. Compliance with the nitrogen oxide emission limit shall be determined in accordance with the 40 CFR part 60 Appendix A Method 7 or 7E.  | Rule 335-3-10-.03 (1)   |
| 6. Compliance with the carbon monoxide emission limit shall be determined in accordance with the 40 CFR Part 60 Appendix A Method 10.  | Rule 335-3-10-.03 (1)   |
| 7. Compliance with the volatile organic compound emission limit shall be determined in accordance with the 40 CFR Part 60 Appendix A Method 18, 25, 25A or 25B.                              | Rule 335-3-10-.03 (1)   |
| 8. Compliance with the sulfuric acid mists emission limit shall be determined in accordance with the 40 CFR Part 60 Method 8 or Conditional Test Method 13, 13A, or 13B.                     | Rule 335-3-10-.03 (1)   |
| 9. The fuel oil sulfur content shall be measured in accordance with fuel oil sampling and analysis procedures in the appropriate ASTM method.  | Rule 335-3-1-.04 (2)(e)   |

#### Emission Monitoring

- |   |  |
|---|--|
| 1. A particulate matter emissions test shall be performed at least once per year.   | Rule 335-3-16-.05                                |
| 2. A particulate matter emissions test shall be performed within thirty days of commencement of operations of a fuel oil system. At least once every five years thereafter, the annual performance test shall be performed while firing fuel oil.   | Rule 335-3-16-.05                                |
| 3. For particulate matter, sulfur dioxide, sulfuric acid mists, nitrogen oxides, carbon monoxide and volatile organic compound periodic monitoring, if any three-hour block average lime mud feed rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the lime mud feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. | Rule 335-3-16-.05                                |
| 4. For particulate matter and opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent during times when lime mud is being fed, the cause is to be investigated and appropriate corrective action is to be taken.  | Rule 335-3-16-.05                                |
| 5. A total reduced sulfur continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR 60.284.   | Rule 335-3-10-.02 (28)                           |
| 6. A continuous emission monitoring system for the measurement of opacity shall be installed, operated and maintained.  | Rule 335-3-10-.02 (28)<br>Rule 335-3-11-.06 (38) |

## No. 3 Lime Kiln Provisos

| Federally Enforceable Provisos  | Regulations            |
|---|------------------------|
| 7. A sulfur dioxide emissions test shall be performed at least once every five years.   | Rule 335-3-16-.05      |
| 8. For sulfur dioxide periodic monitoring obtain fuel receipts from the fuel oil supplier that certify sulfur content in fuel for every load received by the mill.  | Rule 335-3-16-.05      |
| 9. A nitrogen oxide emissions test shall be performed at least once every five years.   | Rule 335-3-16-.05      |
| 10. A carbon monoxide emissions test shall be performed at least once every five years.   | Rule 335-3-16-.05      |
| 11. A sulfuric acid mists emissions test shall be performed at least once every five years.   | Rule 335-3-16-.05      |
| 12. A volatile organic compound emissions test shall be performed at least once every five years.   | Rule 335-3-16-.05      |
| 13. Pursuant to 40 CFR Part 63, Subpart MM, the Continuous Opacity Monitoring System shall meet the provisions of Performance Specification 1 in appendix B to 40 CFR Part 60, as well as 40 CFR 63.6(h), 63.8, and 63.864(d)(3) and (4).   | Rule 335-3-11-.06 (38) |
| 14. As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM. | Rule 335-3-11-.06 (38) |
| 15. For compliance with 40 CFR 63 Subpart MM, a periodic particulate matter performance test shall be performed, pursuant to 40 CFR 63.865, every 5 years.<br>Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.                                  | Rule 335-3-11-.06 (38) |
| 16. The facility must maintain proper operation of the ESP's automatic voltage control (AVC).   | Rule 335-3-11-.06 (38) |
| <b>Recordkeeping and Reporting Requirements</b>   |                        |
| 1. A particulate matter emissions test report shall be submitted to the Department at least once per year.  | Rule 335-3-16-.05      |
| 2. Records of all three-hour block average lime mud flow rates shall be made and maintained on file available for inspection for at least five years.   | Rule 335-3-16-.05      |
| 3. Records of all six-minute average opacities shall be made and maintained on file available for inspection for a period of five years.  | Rule 335-3-16-.05      |
| 4. A sulfur dioxide emissions test report shall be submitted to the Department at least every five years.   | Rule 335-3-16-.05      |
| 5. A sulfuric acid mists emissions test report shall be submitted to the Department at least once every five years.   | Rule 335-3-16-.05      |
| 6. A nitrogen oxide emissions test report shall be submitted to the Department at least every five years.   | Rule 335-3-16-.05      |
| 7. A carbon monoxide emissions test report shall be submitted to the Department at least every five years.  | Rule 335-3-16-.05      |

## No. 3 Lime Kiln Provisos

| Federally Enforceable Provisos   | Regulations            |
|--|------------------------|
| 8. A volatile organic compound emissions test report shall be submitted to the Department at least every five years.   | Rule 335-3-16-.05      |
| 9. A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information: <ul style="list-style-type: none"> <li>a. The magnitude of excess emissions greater than 8 parts per million adjusted to 10 percent oxygen computed from twelve-hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).</li> <li>b. The date and time of commencement and completion of each time period of excess emissions.</li> <li>c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.</li> <li>d. The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.</li> <li>e. When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.</li> </ul> | Rule 335-3-10-.02 (28) |
| 10. A written report of the excess opacity emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information: <ul style="list-style-type: none"> <li>a. The magnitude of excess emissions greater than 20 percent, computed from six-minute averages (data recorded during periods of monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).</li> <li>b. The date and time of commencement and completion of each time period of excess emissions.</li> <li>c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.</li> <li>d. The date and time identifying each period during which the monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.</li> <li>e. When no excess emissions have occurred and the monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.</li> </ul>  | Rule 335-3-16-.05      |
| 11. Fuel receipts from the fuel oil supplier that certify sulfur content in fuel for every load received by the mill shall be maintained on site available for inspection for at least five years.   | Rule 335-3-16-.05      |
| 12. The facility must submit a Notification of Intent to commence operation of a fuel oil system at least thirty days before operation is scheduled to begin.  | Rule 335-3-16-.05      |
| 13. Records of the amount of fuel oil fired shall be made and maintained on file available for review for at least five years.   | Rule 335-3-16-.05      |

## No. 3 Lime Kiln Provisos

### Federally Enforceable Provisos

### Regulations

- |   |                        |
|---|------------------------|
| <p>14. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of any occurrence when corrective action is required when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity during times when lime mud is fed, and when a violation is noted when opacity is greater than 20 percent for 3 percent or more of the operating time within any semiannual period.</p> <p>For each failure to meet the opacity standard, the date, start time, and duration of each failure must be recorded, along with the actions taken to minimize emissions, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.</p> <p>The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.</p>  | Rule 335-3-11-.06 (38) |
| <p>15. Pursuant to 40 CFR Part 63, Subpart MM, the facility must maintain records demonstrating that proper operation of the ESP's automatic voltage control (AVC) system was maintained.</p>   | Rule 335-3-11-.06 (38) |
| <p>16. Pursuant to 40 CFR Part 63, Subpart MM the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in 40 CFR 63.867(c), including the number and duration of occurrences when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity, and when the opacity is greater than 20 percent for 3 percent or more of the operating time within any semiannual period. If the Total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to 40 CFR 63.864(k)(2) occurred, information from both the Summary Report and Excess Emissions Report must be submitted.</p> <p>Excess Emissions and Summary Reports must be reported electronically via CEDRI per 40 CFR 63.867(d)(2).</p> <p>Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.</p> | Rule 335-3-11-.06 (38) |
| <p>17. The facility shall maintain records of all 6-minute periods when the opacity is greater than 20%.</p>  | Rule 335-3-11-.06 (38) |
| <p>18. Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of the CaO production rates in units of Mg/d or ton/d.</p>   | Rule 335-3-11-.06 (38) |

## K-1 Digester System Informational Summary

**Description:** K-1 Digester System

**Emission Unit No:** 005

**Installation Date:** 1957                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 38,750 Air-dry lb/hr

**Operating Schedule:** 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| <b>Emission Point</b> | <b>Point Description</b>            | <b>Pollutant</b> | <b>Emission Limit</b> | <b>Standard</b>        |
|-----------------------|-------------------------------------|------------------|-----------------------|------------------------|
| Z005                  | K-1 Digester System<br>(State Only) | TRS              | Incineration          | Rule 335-3-5-.04 (5)   |
| Z005                  | K-1 Digester System                 | HAPs             | Incineration          | Rule 335-3-11-.06 (18) |



## K-1 Digester System Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>             |
|---|--------------------------------|
| <b>Applicability</b>  |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03              |
| 2. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S (See "Provisos for Pulping System Processes", "Process Condensates" and "Enclosures and Closed Vent Systems" for additional requirements). | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>   |                                |
| 1. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>   |                                |
| 1. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |
| <b>Emission Monitoring</b>  |                                |
| 1. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |
| <b>Recordkeeping and Reporting Requirements</b>   |                                |
| 1. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |

## K-1 Digester System Provisos

| <b>State Only Enforceable Provisos</b>   | <b>Regulations</b>    |
|--|-----------------------|
| <p><b>Applicability (State Only)</b></p> <p>1. This source is subject to the requirements of ADEM Admin. Code R. 335-3-5-.04(5) total reduced sulfur.</p>  | Rule 335-3-5-.04 (5)  |
| <p><b>Emission Standards (State Only)</b></p> <p>1. For this source, all gases discharged that contain total reduced sulfur in excess of 5 parts per million corrected to ten percent oxygen shall be incinerated in the power boilers at the facility subjecting the gases to a minimum temperature of 1200 degrees Fahrenheit for at least 0.5 seconds. If an owner or operator demonstrates to the satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation.</p> | Rule 335-3-5-.04 (5)  |
| <p><b>Compliance and Performance Test Methods and Procedures (State Only)</b></p> <p>1. This source is subject to no additional requirements other than those listed in the general provisos.</p>  |                       |
| <p><b>Emission Monitoring (State Only)</b></p> <p>1. For total reduced sulfur periodic monitoring at least once per day mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours.</p>   | Rule 335-3-16-.05 (c) |
| <p><b>Recordkeeping and Reporting Requirements (State Only)</b></p> <p>1. Once per day records of whether or not total reduced sulfur gases are being incinerated shall be made and maintained on file available for inspection for a period of five years.</p>  | Rule 335-3-16-.05 (c) |

## K-2 Digester System Informational Summary

**Description:** K-2 Digester

**Emission Unit No:** 024

**Installation Date:** 1992                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 87,500 Air-dry lb/hr

**Operating Schedule:** 8760 hours/year

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

**40 CFR Part 60 Subpart BB**

**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| <b>Emission Point</b> | <b>Point Description</b> | <b>Pollutant</b> | <b>Emission Limit</b> | <b>Standard</b>        |
|-----------------------|--------------------------|------------------|-----------------------|------------------------|
| X024                  | K-2 Digester System      | TRS              | Incineration          | Rule 335-3-10-.02 (28) |
| X024                  | K-2 Digester System      | HAPs             | Incineration          | Rule 335-3-11-.06 (18) |

## K-2 Digester System Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>             |
|---|--------------------------------|
| <b>Applicability</b>  |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03              |
| 2. This source is subject to federal New Source Performance Standards Subpart BB and 40 CFR 60 Subpart A, General Provisions.   | Rule 335-3-10-.02 (1) and (28) |
| 3. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S (See "Provisos for Pulping System Processes", "Process Condensates" and "Enclosures and Closed Vent Systems" for additional requirements). | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>   |                                |
| 1. For this source all gases discharged that contain total reduced sulfur in excess of 5 parts per million by volume on a dry basis, corrected to 10 percent oxygen, shall be incinerated subjecting the gases to a minimum temperature of 1200 degrees Fahrenheit for at least 0.5 seconds.                  | Rule 335-3-10-.02 (28)         |
| 2. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>   |                                |
| 1. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |
| <b>Emission Monitoring</b>  |                                |
| 2. For total reduced sulfur periodic monitoring, once per day mill personnel shall determine if the gases are being incinerated as required. If gases are not being incinerated, investigate and take corrective action within twenty-four hours.   | Rule 335-3-16-.05 (c)          |
| 3. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |
| <b>Recordkeeping and Reporting Requirements</b>   |                                |
| 1. Once per day records of whether or not total reduced sulfur gases are being incinerated shall be made and maintained on file available for inspection for a period of five years.  | Rule 335-3-16-.05 (c)          |
| 2. See "Provisos for Pulping System Processes", "Process Condensates", and "Enclosures and Closed-Vent Systems" for details.  | Rule 335-3-11-.06 (18)         |

## Brown Stock Washer System Informational Summary

**Description:** "A" Line Brown Stock Washers  
"B" Line Brown Stock Washers

**Emission Unit No:** 017

|                      |                           |  |
|----------------------|---------------------------|--|
| <b>Emission Unit</b> | <b>Installation Date:</b> | <b>Reconstruction/Modification Date:</b> |
| "A" Line             | 1957                      | N/A                                      |
| "B" Line             | 1988                      | N/A                                      |

|                       |                            |                            |
|-----------------------|----------------------------|----------------------------|
| <b>Emission Unit:</b> | <b>Operating Capacity:</b> | <b>Operating Schedule:</b> |
| "A" Line              | 87,500 Air-dry lb pulp/hr  | 8,760 hours/year           |
| "B" Line              | 38,750 Air-dry lb pulp/hr  | 8,760 hours/year           |

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| Emission Point | Point Description   | Pollutant | Emission Limit | Standard               |
|----------------|---------------------|-----------|----------------|------------------------|
| X017           | Brown Stock Washers | HAPs      | Incineration   | Rule 335-3-11-.06 (18) |

## Brown Stock Washer System Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>             |
|---|--------------------------------|
| <b>Applicability</b>  |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03              |
| 2. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and 40 CFR Part 63 Subpart S (See Provisos for "Pulping System Processes" and "Enclosures and Closed Vent Systems" for additional requirements). | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>   |                                |
| 1. See Provisos for "Pulping System Processes" and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>   |                                |
| 1. See Provisos for "Pulping System Processes" and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |
| <b>Emission Monitoring</b>  |                                |
| 1. See Provisos for "Pulping System Processes" and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |
| <b>Recordkeeping and Reporting Requirements</b>   |                                |
| 1. See Provisos for "Pulping System Processes" and "Enclosures and Closed Vent Systems" for additional requirements.  | Rule 335-3-11-.06 (18)         |

## Bleaching System Informational Summary

**Description:** No. 1 Bleach Plant  
No. 2 Bleach Plant

**Emission Unit No:** 018  
019

|                      |                           |  |
|----------------------|---------------------------|--|
| <b>Emission Unit</b> | <b>Installation Date:</b> | <b>Reconstruction/Modification Date:</b> |
| No. 1                | 1957                      | N/A                                      |
| No. 2                | 1992                      | N/A                                      |

|                       |                            |                            |
|-----------------------|----------------------------|----------------------------|
| <b>Emission Unit:</b> | <b>Operating Capacity:</b> | <b>Operating Schedule:</b> |
| No. 1                 | 58,333 lb bleached pulp/hr | 8,760 hours/year           |
| No. 2                 | 88,583 lb bleached pulp/hr | 8,760 hours/year           |

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| Emission Point | Point Description                        | Pollutant        | Emission Limit  | Standard               |
|----------------|--|------------------|---|------------------------|
| X018 and X019  | Bleaching System                         | HAP              | Enclosed and vented to a closed-vent system (per 63.450) and routed to a control device | Rule 335-3-11-.06 (18) |
| X018 and X019  | Bleaching System                         | HAP              | ≤ 10 ppmv of total chlorinated HAP  | Rule 335-3-11-.06 (18) |
| X018           | No. 1 Bleach Line<br><b>(State Only)</b> | Chlorine Dioxide | ≤ 2.38 lb/hr  | Rule 335-3-16-.05      |
| X018           | No. 1 Bleach Line<br><b>(State Only)</b> | Chlorine         | ≤ 8.12 lb/hr  | Rule 335-3-16-.05      |
| X019           | No. 2 Bleach Line<br><b>(State Only)</b> | Chlorine Dioxide | ≤ 4.0 lb/hr   | Rule 335-3-16-.05      |
| X019           | No. 2 Bleach Line<br><b>(State Only)</b> | Chlorine         | ≤ 6.0 lb/hr   | Rule 335-3-16-.05      |

## Bleaching System Provisos

| Federally Enforceable Provisos   | Regulations                    |
|--|--------------------------------|
| <b>Applicability</b>   |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".  | Rule 335-3-16-.03              |
| 2. This source is subject to the requirements of 40 CFR Part 63 General Provisions as provided for in Table 1 of Subpart S and Subpart S.  | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>  |                                |
| 1. The equipment at each bleaching stage, of the bleaching system, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device which meets the requirements as specified in Proviso 3 of this section.  | Rule 335-3-11-.06 (18)         |
| 2. The enclosures and closed-vent system shall meet the requirements specified in the "Enclosures and Closed-Vent Systems" Emission Standards Proviso 1(b)-(d).  | Rule 335-3-11-.06 (18)         |
| 3. The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment in this section shall achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP.   | Rule 335-3-11-.06 (18)         |
| 4. To reduce chloroform emissions the permittee shall comply with the effluent limitation guidelines specified in 40 CFR 63.445(d)(1), or use no hypochlorite or chlorine for bleaching in the bleaching system.   | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>  |                                |
| 1. For the enclosures and closed-vent system see the Compliance and Performance Test Methods and Procedures provisos for "Enclosures and Closed-Vent Systems".   | Rule 335-3-11-.06 (18)         |
| 2. Compliance with the total chlorinated HAP emission limit shall be determined in accordance with the test method described in 40 CFR 63.457.   | Rule 335-3-11-.06 (18)         |
| <b>Emission Monitoring</b>   |                                |
| 1. For the enclosures and closed-vent system see the Emission Monitoring provisos for "Enclosures and Closed-Vent Systems".  | Rule 335-3-11-.06 (18)         |
| 2. A continuous monitoring system (CMS, as defined in 40 CFR 63.2) shall be installed, calibrated, certified, operated, and maintained according to the manufacturer's specifications. The CMS shall include a continuous recorder.  | Rule 335-3-11-.06 (18)         |
| 3. The CMS shall be operated to measure the following parameters for each gas scrubber used to comply with the bleaching system requirements of 40 CFR 63.445(c). <ol style="list-style-type: none"> <li>a. The pH or the oxidation/reduction potential of the gas scrubber effluent;</li> <li>b. The gas scrubber liquid influent flow rate; and</li> <li>c. The bleach plant exhaust gas fan rpm (See March 20, 2001 EPA Region IV letter granting approval of alternative monitoring.)</li> </ol> | Rule 335-3-11-.06 (18)         |
| 4. The bleaching system scrubber shall be operated in accordance with the parameter value ranges established in accordance with 40 CFR 63.453(n).  | Rule 335-3-11-.06 (18)         |
| 5. A chlorinated HAP performance test shall be performed within 60 months from the date of the previous performance test.  | Rule 335-3-11-.06 (18)         |



## Bleaching System Provisos

### **Federally Enforceable Provisos**

### **Regulations**

#### **Recordkeeping and Reporting Requirements**

- |  |                        |
|--|------------------------|
| 1. See the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” provisos.                                      | Rule 335-3-11-.06 (18) |
| 2. The owner or operator of this source shall comply with the recordkeeping and reporting requirements of 40 CFR 63.10, as shown in Table 1 Subpart S. | Rule 335-3-11-.06 (18) |
| 3. A chlorinated HAP performance test report shall be submitted to the Department at least once every 60 months.                                       | Rule 335-3-11-.06 (18) |

## Bleaching System Provisos

| <b>State Only Enforceable Provisos</b>  | <b>Regulations</b> |
|---|--------------------|
| <b>Applicability (State Only)</b>   |                    |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03  |
| <b>Emission Standards (State Only)</b>  |                    |
| 1. No. 1 Bleach Line chlorine dioxide emissions shall not exceed 2.38 pounds per hour.  | Rule 335-3-16-.05  |
| 2. No. 1 Bleach Line chlorine emissions shall not exceed 8.12 pounds per hour.  | Rule 335-3-16-.05  |
| 3. No. 2 Bleach Line chlorine dioxide emissions shall not exceed 4.0 pounds per hour.   | Rule 335-3-16-.05  |
| 4. No. 2 Bleach Line chlorine emissions shall not exceed 6.0 pounds per hour.   | Rule 335-3-16-.05  |
| <b>Compliance and Performance Test Methods and Procedures (State Only)</b>  |                    |
| 1. Chlorine dioxide and chlorine emissions shall be measured in accordance with the impinger capture technique described in the National Council of the Paper Industry for Air and Stream Improvement, Inc. Technical Bulletin No. 520, April 1987. | Rule 335-3-16-.05  |
| <b>Emission Monitoring (State Only)</b>   |                    |
| 1. A chlorine dioxide and chlorine emissions test shall be performed at least once every five years to certify compliance and set periodic monitoring parameters for the No. 1 Bleach Line scrubber and the No. 2 Bleach Line scrubber.             | Rule 335-3-16-.05  |
| <b>Recordkeeping and Reporting Requirements (State Only)</b>  |                    |
| 1. The chlorine dioxide and chlorine emissions test reports shall be submitted to the Department at least once every five years.  | Rule 335-3-16-.05  |

## 50 Ton Per Day Chlorine Dioxide Generator Informational Summary

**Description:** 50 Ton Per Day Chlorine Dioxide Generator

**Emission Unit No:** 020

**Installation Date:** 1991                      **Reconstruction/Modification Date:** N/A

**Operating Capacity:** 4,170 lb/hr

**Operating Schedule:** 8760 hours/year

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

### Pollutants Emitted

| Emission Point | Point Description  | Pollutant        | Emission Limit | Standard          |
|----------------|--|------------------|----------------|-------------------|
| X020           | 50 Ton Per Day Chlorine Dioxide Generator System<br>(State Only) | Chlorine         | ≤ 1.43 lb/hr   | Rule 335-3-16-.05 |
| X020           | 50 Ton Per Day Chlorine Dioxide Generator System<br>(State Only) | Chlorine dioxide | ≤ 3.04 lb/hr   | Rule 335-3-16-.05 |

## 50 Ton Per Day Chlorine Dioxide Generator Provisos

| <b>State Only Enforceable Provisos</b>   | <b>Regulations</b> |
|--|--------------------|
| <b>Applicability (State Only)</b>  |                    |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".  | Rule 335-3-16-.03  |
| <b>Emission Standards (State Only)</b>   |                    |
| 1. Chlorine emissions shall not exceed 1.43 pounds per hour.   | Rule 335-3-16-.05  |
| 2. Chlorine dioxide emissions shall not exceed 3.04 pounds per hour.   | Rule 335-3-16-.05  |
| <b>Compliance and Performance Test Methods and Procedures (State Only)</b>   |                    |
| 1. Chlorine and chlorine dioxide emissions shall be measured in accordance with the impinger capture technique described in the National Council of the Paper Industry for Air and Stream Improvement, Inc. Technical Bulletin No. 520, April 1987.  | Rule 335-3-16-.05  |
| <b>Emission Monitoring (State Only)</b>  |                    |
| 1. A chlorine emissions test shall be performed within once every five years to certify compliance and set periodic monitoring parameters.   | Rule 335-3-16-.05  |
| 2. A chlorine dioxide emissions test shall be performed once every five years to certify compliance and set periodic monitoring parameters.  | Rule 335-3-16-.05  |
| 3. At least once daily record chilled water flow rate and liquid temperature to the scrubber. If the chilled water flow rate is less than 90% of the chilled water temperature is more than 5 degrees Fahrenheit higher than the average respective value set by a required periodic test that showed compliance or a test approved by the Department that showed compliance, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. | Rule 335-3-16-.05  |
| <b>Recordkeeping and Reporting Requirements (State Only)</b>   |                    |
| 1. Maintain records of daily chilled water flow rate and liquid temperature to the scrubber, available for inspection for at least five years.   | Rule 335-3-16-.05  |
| 2. A chlorine and chlorine dioxide emissions test report shall be submitted to the Department at least once every five years.  | Rule 335-3-16-.05  |

## Pulping System Processes Informational Summary

**Description:** Pulping System Processes

**Emission Unit No:** S443

**Installation Date:** N/A

**Reconstruction/Modification Date:** N/A

**Operating Capacity:** N/A

**Operating Schedule:** 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| Emission Point | Point Description        | Pollutant | Emission Limit  | Standard               |
|----------------|--------------------------|-----------|---|------------------------|
| S443           | Pulping System Processes | HAPs      | Equipment systems shall be enclosed and vented into a closed-vent system and routed to a control device that meets the following requirements: <ol style="list-style-type: none"> <li>a. Reduce total HAP emissions by 98 percent or more by weight; or</li> <li>b. Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or</li> <li>c. Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871°C (1600°F) and a minimum residence time of 0.75 seconds; or</li> <li>d. Reduce total HAP emissions using a boiler, lime kiln or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or</li> </ol> | Rule 335-3-11-.06 (18) |

## Pulping System Processes Provisos

|      |                               |      |   |                        |
|------|-------------------------------|------|---|------------------------|
|      |                               |      | e. Reduce total HAP emissions using a boiler with heat input capacity greater than 150 million Btu per hour by introducing the HAP emission stream with the combustion air. |                        |
| S443 | Pulping System Processes      | HAPs | The enclosures and closed-vent system shall meet the requirements specified in the Enclosures and Closed-Vent Systems Emission Standards Proviso 1(a)-(c).                  | Rule 335-3-11-.06 (18) |
| S443 | Pulping System Processes HVLC | HAPs | To be in compliance with 40 CFR 63.443  | Rule 335-3-11-.06 (18) |

## Pulping System Processes Provisos

| Federally Enforceable Provisos   | Regulations                    |
|--|--------------------------------|
| <b>Applicability</b>   |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".  | Rule 335-3-16-.03              |
| 2. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.  | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>  |                                |
| 1. For pulping system processes, per the requirements of 40 CFR Part 63 Subpart S, Low Volume High Concentration Gases shall be controlled by incineration in the power boilers at the facility.   | Rule 335-3-11-.06 (18)         |
| 2. Per the requirements of 40 CFR Part 63 Subpart S, HVLC gases shall be incinerated in the power boilers at the facility.   | Rule 335-3-11-.06 (18)         |
| 3. Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: <ul style="list-style-type: none"> <li>a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and</li> <li>b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and</li> <li>c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.</li> </ul>   | Rule 335-3-11-.06 (18)         |
| 4. Equipment systems listed in Provisos 1 and 2 of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in the following Proviso. The enclosures and closed-vent system shall meet the requirements specified in the "Enclosures and Closed-Vent Systems" Emission Standards Proviso 1(a) – (c).   | Rule 335-3-11-.06 (18)         |
| 5. The control device used to reduce total HAP emissions from each equipment system listed in provisos 1 and 2 of this section shall either or both: <ul style="list-style-type: none"> <li>a. Reduce total HAP emissions by 98 percent or more by weight; or</li> <li>b. Reduce total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or</li> <li>c. Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871°C (1600°F) and a minimum residence time of 0.75 seconds; or</li> <li>d. Reduce total HAP emissions using one of the following: <ul style="list-style-type: none"> <li>i. A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or</li> <li>ii. A boiler or recovery furnace with a heat input capacity greater than or equal to 44 megawatts (150 million British thermal units per hour) by introducing the HAP emission stream with the combustion air.</li> </ul> </li> </ul> | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>  |                                |
| 1. See Compliance and Performance Test Methods and Procedures provisos for "Enclosures and Closed-Vent Systems" for details.   | Rule 335-3-11-.06 (18)         |

## Pulping System Processes Provisos

### Federally Enforceable Provisos

### Regulations

#### Emission Monitoring

1. For the closed-vent system see the Emission Monitoring provisos for “Enclosures and Closed-Vent Systems”.

Rule 335-3-11-.06 (18)

#### Recordkeeping and Reporting Requirements

1. For the pulping system processes and each applicable enclosure opening, closed-vent system, and closed collection system, per the requirements of 40 CFR 63.443, the permittee shall meet the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” provisos.

Rule 335-3-11-.06 (18)



## Process Condensates Informational Summary

**Description:** Process Condensates

**Emission Unit No:** S446

**Installation Date:** N/A

**Reconstruction/Modification Date:** N/A

**Operating Capacity:** N/A

**Operating Schedule:** 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| Emission Point | Point Description   | Pollutant | Emission Limit   | Standard               |
|----------------|---|-----------|--|------------------------|
| S446           | Process Condensates<br>(1) Each digester system;<br>(2) Each turpentine recovery system;<br>(3) Each evaporator system condensate from:<br>a. the vapors from each stage where weak liquor is introduced (feed stages); and<br>b. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages);<br>(4) Each HVLC collection system; and<br>(5) Each LVHC collection system. | HAPs      | Collect the pulping process condensates from equipment systems in this section that in total contain 11.1 pounds or more per ton of ODP. | Rule 335-3-11-.06 (18) |
| S446           | Process Condensates<br>(1) Each digester system;<br>(2) Each turpentine recovery system;<br>(3) Each evaporator system condensate from:<br>a. the vapors from each stage where weak liquor is introduced (feed stages); and<br>b. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages);<br>(4) Each HVLC collection system; and<br>(5) Each LVHC collection system. | HAPs      | Treat the pulping process condensates to remove 10.2 pounds or more per ton of ODP.  | Rule 335-3-11-.06 (18) |

**Process Condensates  
Provisos**

|      |  |      |   |                        |
|------|--|------|---|------------------------|
| S446 | <p>Process Condensates</p> <p>(1) Each digester system;</p> <p>(2) Each turpentine recovery system;</p> <p>(3) Each evaporator system condensate from:</p> <p style="margin-left: 20px;">a. the vapors from each stage where weak liquor is introduced (feed stages); and</p> <p style="margin-left: 20px;">b. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages);</p> <p>(4) Each HVLC collection system; and</p> <p>(5) Each LVHC collection system.</p> | HAPs | <p>The pulping process condensates from the equipment systems in this section shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in 40 CFR 63.446</p> | Rule 335-3-11-.06 (18) |
| S446 | <p>Process Condensates</p> <p>(1) Each digester system;</p> <p>(2) Each turpentine recovery system;</p> <p>(3) Each evaporator system condensate from:</p> <p style="margin-left: 20px;">a. the vapors from each stage where weak liquor is introduced (feed stages); and</p> <p style="margin-left: 20px;">b. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages);</p> <p>(4) Each HVLC collection system; and</p> <p>(5) Each LVHC collection system.</p> | HAPs | <p>The enclosures and closed-vent system shall meet the requirements specified in 40 CFR 63.450</p>   | Rule 335-3-11-.06 (18) |

## Process Condensates Provisos

| Federally Enforceable Provisos   | Regulations                    |
|--|--------------------------------|
| <b>Applicability</b>   |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03              |
| 2. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.  | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>  |                                |
| 1. For Process Condensates, per the requirements of 40 CFR Part 63 Subpart S for the pulping process condensates shall be collected and treated.   | Rule 335-3-11-.06 (18)         |
| 2. Collect the combined pulping process condensates that in total contain a total HAP mass of 5.5 kilograms or more of total HAP per megagram (11.1 pounds per ton) of ODP shall be controlled as specified in 40 CFR 63.446(d) and (e).   | Rule 335-3-11-.06 (18)         |
| 3. The pulping process condensates from the equipment systems in this section shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in bullets (a) and (b) of this section.   | Rule 335-3-11-.06 (18)         |
| <ul style="list-style-type: none"> <li>a. Each closed collection system shall meet the individual drain system requirements specified in 40 CFR 63.960, 63.961, and 63.962 of subpart RR of this part, except for closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 40 CFR 63.693 as specified in 40 CFR 63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(B)(5)(iii);</li> <li>b. If a condensate tank is used in the closed collection system, the tank shall meet the following requirements: <ul style="list-style-type: none"> <li>i. The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in 40 CFR 63.450 and routed to a control device that meets the requirements in 40 CFR 63.443(d); and</li> <li>ii. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.</li> </ul> </li> </ul> |                                |
| 4. Each pulping process condensate from the equipment systems listed in this section shall be treated according to one of the following options: <ul style="list-style-type: none"> <li>a. Recycle the pulping process condensate to an equipment system specified in 40 CFR 63.443(a) meeting the requirements specified in 40 CFR 63.443(c) and (d); or</li> <li>b. Discharge the pulping process condensate below the liquid surface of a biological treatment system and treated to meet the requirements specified in paragraph (e)(3), (4), or (5) of 40 CFR 63.446 and total HAP shall be measured as specified in 40 CFR 63.457(g).</li> </ul>   | Rule 335-3-11-.06 (18)         |
| 5. Treat the pulping process condensates to remove 5.1 kilograms or more of total HAP per megagram (10.2 pounds per ton) of ODP.   | Rule 335-3-11-.06 (18)         |

## Process Condensates Provisos

### Federally Enforceable Provisos

### Regulations

#### Compliance and Performance Test Methods and Procedures

- |  |                               |
|--|-------------------------------|
| <p>1. An initial performance test is required as described in 40 CFR 63.457 to determine the concentration of HAP and/or methanol in liquid samples.</p> | <p>Rule 335-3-11-.06 (18)</p> |
| <p>2. For the closed-vent system see the Compliance and Performance Test Methods and Procedures provisos for “Enclosures and Closed-Vent Systems”.</p>   | <p>Rule 335-3-11-.06 (18)</p> |

#### Emission Monitoring

- |   |                               |
|---|-------------------------------|
| <p>1. A continuous monitoring system (CMS, as defined in 40 CFR Part 63 Subpart A General Provisions 63.2) shall be installed, calibrated, certified, operated, and maintained according to the manufacturer’s specifications. The CMS shall include a continuous recorder.</p>   | <p>Rule 335-3-11-.06 (18)</p> |
| <p>2. A CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in Proviso 4 of this section to comply with the condensate applicability requirements specified in 40 CFR 63.446(c). The CMS shall calculate a fifteen-day rolling average of the pounds of methanol collected per ton of ODP.</p>   | <p>Rule 335-3-11-.06 (18)</p> |
| <p>3. Each owner or operator using an open biological treatment system to comply with 40 CFR 63.446(e)(2) shall perform the daily monitoring procedures specified in either Proviso 3(a) or (b) of this section and shall conduct a performance test each quarter using the procedures specified in Proviso 3 (c) of this section.</p> <p style="margin-left: 20px;">a. Comply with the monitoring and sampling requirements specified in Provisos (a)(i) and (ii) of this section.</p> <p style="margin-left: 40px;">i. On a daily basis, monitor the following parameters for each open biological treatment unit:</p> <p style="margin-left: 60px;">A. Composite daily sample of outlet BOD5 concentration to monitor for maximum daily and maximum monthly average;</p> <p style="margin-left: 60px;">B. ASB Aeration Rate (as an alternative to mixed liquor volatile suspended solids);</p> <p style="margin-left: 60px;">C. Horsepower of aerator unit(s);</p> <p style="margin-left: 60px;">D. Inlet liquid flow; and</p> <p style="margin-left: 60px;">E. Liquid temperature.</p> <p style="margin-left: 40px;">ii. If the Inlet and Outlet Concentration Measurement Procedure (Procedure 3) in appendix C of 40 CFR Part 63 is used to determine the fraction of HAP compounds degraded in the biological treatment system as specified in 40 CFR 63.457(1), conduct the sampling and archival requirements specified in Proviso 3 (a)(ii)(A) and (B) of this section.</p> <p style="margin-left: 60px;">A. Obtain daily inlet and outlet liquid grab samples from each biological treatment unit to have HAP data available to perform quarterly performance tests specified in Proviso 3 (c) of this section and the compliance tests specified in Proviso 8 of this section.</p> <p style="margin-left: 60px;">B. Store the samples as specified in 40 CFR 63.457(n) until after the results of the soluble BOD5 test required in Proviso 4 (a)(i)(A) of this section are obtained. The storage requirement is needed since the soluble BOD5 test requires 5 days or more to obtain</p> | <p>Rule 335-3-11-.06 (18)</p> |

## Process Condensates Provisos

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| <p>results. If the results of the soluble BOD5 test are outside of the range established during the initial performance test, then the archive sample shall be used to perform the mass removal or percent reduction determinations.</p> <p>b. The daily ASB aeration rate was established as an alternative to the Mixed Liquor Volatile Suspended Solids monitoring requirements of Proviso 3 (a) of this section.</p> <p>c. Conduct a performance test for condensate treatment (not condensate collection) as specified in 40 CFR 63.457(1) within 45 days after the beginning of each quarter and meet the applicable emission limit in 40 CFR 63.446(e)(2)</p> <p>4. Each owner or operator using an enclosure and/or closed-vent system to comply with 40 CFR 63.446(e)(1) shall monitor the daily flow of process condensate to the enclosure and/or closed-vent system and shall conduct an annual performance test as specified in 40 CFR 63.475(c) and (g) within 45 days after the beginning of each calendar year. HAP collected and conveyed through a closed-vent system to a lime kiln, recovery furnace, or power boiler is 100 percent controlled except during periods of closed-vent system bypass venting, when no control is counted toward compliance with 40 CFR 63.446(e)(1) or (e)(5).</p> <p>5. The total HAP treated to satisfy the requirements of 40 CFR 63.446(e)(5) shall be the sum of the HAP treated in the enclosure and/or closed-vent system and the HAP treated in the open biological treatment system.</p> <p>6. To establish or reestablish, the value for each operating parameter required to be monitored by this section or to establish appropriate parameters for Proviso 3 (b) of this section, each owner or operator shall use the following procedures:</p> <p>a. During the initial performance test required in 40 CFR 63.457(a) or any subsequent performance test, continuously record the operating parameter;</p> <p>b. Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;</p> <p>c. The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with Proviso 2 of this section; and</p> <p>d. Provide for the Administrator's approval the rational for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.</p> <p>7. Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under Provisos 1 through 4 of this section and established under this subpart. Except as provided in Proviso 8 of this section, 40 CFR 63.443(e), or 63.446(g), operation of the control device below minimum operating parameter values</p> | <p>Rule 335-3-11-.06 (18)</p> <p>Rule 335-3-11-.06 (18)</p> <p>Rule 335-3-11-.06 (18)</p> <p>Rule 335-3-11-.06 (18)</p> |
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## Process Condensates Provisos

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or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

8. The procedures of this proviso apply to each owner or operator of an open biological treatment system complying with Proviso 3 of this section whenever a monitoring parameter excursion occurs, and the owner or operator chooses to conduct a performance test to demonstrate compliance with the applicable emission limit. A monitoring parameter excursion occurs whenever the monitoring parameters specified in Proviso 3 (a)(i)(A) through (C) of this section or any of the monitoring parameters specified in Proviso 3 (b) of this section are below minimum operating parameter values or above maximum operating parameter values established in Proviso 5 of this section.
- a. As soon as practical after the beginning of the monitoring parameter excursion, the following requirements shall be met:
    - i. Before the steps in Proviso 8 (a)(ii) or (iii) of this section are performed, all sampling and measurements necessary to meet the requirements in Proviso 8 (b) of this section shall be conducted.
    - ii. Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period.
    - iii. Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.
  - b. A parameter excursion is not a violation of the applicable emission standard if the results of the performance test conducted using the procedures in this paragraph in 40 CFR 63.446(e)(2).
    - i. Conduct a performance test as specified in 40 CFR 63.457 using the monitoring data specified in Proviso 3 (a) or (b) of this section that coincides with the time of the parameter excursion. No maintenance or changes shall be made to the open biological treatment system after the beginning of a parameter excursion that would influence the results of the performance test.
    - ii. If the results of the performance test specified in Proviso 8 (b)(i) of this section demonstrate compliance with the applicable emission limit in 40 CFR 63.446(e)(2), then the parameter excursion is not a violation of the applicable emission limit.
    - iii. If the results of the performance test specified in Proviso 8 (b)(i) of this section do not demonstrate compliance with the applicable emission limit in 40 CFR 63.446(e)(2) because the total HAP mass entering the open biological treatment system is below the level needed to demonstrate compliance with the applicable emission limit in 40 CFR 63.446(e)(2), then the owner or operator shall perform the following comparisons:
      - A. If the value of fbio (MeOH) determined during the performance test specified in Proviso 8 (b)(i) of this section is within the range of values established during the initial and subsequent performance tests approved by the Administrator, then the parameter excursion is not a violation of the applicable standard.
      - B. If the value of fbio (MeOH) determined during the performance test specified in Proviso 8 (b)(i) of this section is not within the range of values established during the initial and subsequent

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## Process Condensates Provisos

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- performance tests approved by the Administrator, then the parameter excursion is a violation of the applicable standard.
- iv. The results of the performance test specified in Proviso 8 (b)(i) of this section shall be recorded as specified in 40 CFR 63.454(f).
  - c. If an owner or operator determines that performing the required procedures under Proviso 8 (b) of this section for a nonthoroughly mixed open biological system would expose a worker to dangerous, hazardous, or otherwise unsafe conditions, all of the following procedures shall be performed:
    - i. Calculate the mass removal or percent reduction value using the procedures specified in 40 CFR 63.457(l) except the value for fbio (MeOH) shall be determined using the procedures in appendix E to this part.
    - ii. Repeat the procedures in Proviso 8 (c)(i) of this section for every day until the unsafe conditions have passed.
    - iii. A parameter excursion is a violation of the standard if the percent reduction or mass removal determined in Proviso 8 (c)(i) of this section is less than the percent reduction or mass removal standards specified in 40 CFR 63.446(e)(2), as appropriate, unless the value of fbio (MeOH) determined using the procedures in appendix E of this section, as specified in Proviso 8 (c)(i), is within the range of fbio (MeOH) values established during the initial and subsequent performance tests previously approved by the Administrator.
    - iv. The determination that there is a condition that exposes a worker to dangerous, hazardous, or otherwise unsafe conditions shall be documented according to requirements in 40 CFR 63.455(f).
    - v. The requirements of Provisos 8 (a) and (b) of this section shall be performed and met as soon as practical but no later than 24 hours after the conditions have passed that exposed a worker to dangerous, hazardous, or otherwise unsafe conditions.

### Recordkeeping and Reporting Requirements

- |  |                               |
|--|-------------------------------|
| <p>1. For the pulping process condensates from the equipment systems of this section per the requirements of 40 CFR 63.446 the permittee shall meet the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” provisos.</p>   | <p>Rule 335-3-11-.06 (18)</p> |
| <p>2. For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall meet the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” provisos”.</p>  | <p>Rule 335-3-11-.06 (18)</p> |
| <p>3. The owner or operator shall record and report the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” Proviso 1 for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.</p> | <p>Rule 335-3-11-.06 (18)</p> |
| <p>4. The owner or operator of an open nonthoroughly mixed biological treatment system complying with 40 CFR 63.453(p)(3) instead of 40 CFR.453(p)(2) shall prepare a written record identifying the specific conditions that would expose a worker to dangerous, hazardous, or otherwise unsafe conditions.</p>   | <p>Rule 335-3-11-.06 (18)</p> |

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The record must include a written explanation of the specific reason(s) why a worker would not be able to perform the sampling and test procedures specified in 40 CFR 63.457(1).

5. The owner or operator of an open biological treatment system complying with 40 CFR 63.453(p) shall prepare a written record specifying the results of the performance test specified in 40 CFR 63.453(p)(2).

Rule 335-3-11-.06 (18)

6. If the owner or operator uses the results of the performance test required in 40 CFR 63.453(p)(2) to revise the approved values or ranges of the monitoring parameters specified in 40 CFR 63.453(j)(1) or 2, the owner or operator shall submit an initial notification of the subsequent performance test to the Administrator as soon as practicable, but no later than 15 days, before the performance test required in 40 CFR 63.453(p)(2) is scheduled to be conducted. The owner or operator shall notify the Administrator as soon as practicable, but no later than 24 hours, before the performance test is scheduled to be conducted to confirm the exact date and time of the performance test.

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7. To comply with the open biological treatment system monitoring provisions of 40 CFR 63.453(p)(3), the owner or operator shall notify the Administrator as soon as practicalbe of the onset of the dangerous, hazardous, or otherwise unsafe conditions that did not allow a compliance determination to be conducted using the sampling and test procedures in 40 CFR 63.457(1). The notification shall occur no later than 24 hours after the onset of the dangerous, hazardous, or otherwise unsafe conditions and shall include the specific reason(s) that the sampling and test procedures in 40 CFR 63.457(1) could not be performed.

Rule 335-3-11-.06 (18)



## Enclosures and Closed-Vent Systems Informational Summary

**Description:** Enclosures and Closed-Vent Systems

**Emission Unit No:** S450

**Installation Date:** N/A

**Reconstruction/Modification Date:** N/A

**Operating Capacity:** N/A

**Operating Schedule:** 8760 hours/year

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:  
**40 CFR Part 63 Subpart S**

### Pollutants Emitted

| Emission Point | Point Description  | Pollutant | Emission Limit  | Standard               |
|----------------|--|-----------|---|------------------------|
| S450           | Enclosures and Closed-Vent Systems<br>(1) Pulping System and<br>(2) Bleaching System | HAPs      | <p>Leak Detection and Repair Program</p> <p>Each enclosure shall maintain negative pressure at each enclosure or hood opening.</p> <p>Each enclosure or hood opening closed during the initial performance test shall be maintained in the same closed and sealed position at all times except for sampling, inspection, maintenance, or repairs.</p> <p>Each component of the closed-vent that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppm by volume above background.</p> | Rule 335-3-11-.06 (18) |

## Enclosures and Closed-Vent Systems Provisos

| Federally Enforceable Provisos  | Regulations                    |
|---|--------------------------------|
| <b>Applicability</b>  |                                |
| 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03              |
| 2. This source is subject to federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.   | Rule 335-3-11-.06 (1) and (18) |
| <b>Emission Standards</b>   |                                |
| 1. For the pulping system and pulp bleaching system per the requirements of 40 CFR Part 63 Subpart S each enclosure and closed vent system shall meet the requirements specified in Proviso 1(a)-(c) of this section. <ul style="list-style-type: none"> <li>a. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.</li> <li>b. Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.445(b) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in 40 CFR 63.457(d).</li> <li>c. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443, 63.444, or 63.445 shall comply with either of the following requirements: <ul style="list-style-type: none"> <li>i. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or</li> <li>ii. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.</li> </ul> </li> </ul> | Rule 335-3-11-.06 (18)         |
| <b>Compliance and Performance Test Methods and Procedures</b>   |                                |
| 1. <i>Detectable leak procedures.</i> To measure detectable leaks for closed-vent systems as specified in 40 CFR 63.450 or for pulping process wastewater collection systems as specified in 40 CFR 63.446(d)(2)(i), the owner or operator shall comply with the following: <ul style="list-style-type: none"> <li>a. Method 21, of 40 CFR Part 60, appendix A; and</li> <li>b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:</li> </ul>   | Rule 335-3-11-.06 (18)         |

## Enclosures and Closed-Vent Systems Provisos

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- i. Zero air (less than 10 parts per million by volume of hydrocarbon in air); and
  - ii. A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 parts per million by volume methane or n-hexane.
2. *Negative pressure procedures.* To demonstrate negative pressure at process equipment enclosure openings as specified in 40 CFR 63.450(b), the owner or operator shall use one of the following procedures:
- a. An anemometer to demonstrate flow into the enclosure opening;
  - b. Measure the static pressure across the opening;
  - c. Smoke tubes to demonstrate flow into the enclosure opening; or
  - d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

Rule 335-3-11-.06 (18)

### Emission Monitoring

1. Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified in Proviso 1(a)-(f) of this section.
  - a. For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at once per calendar month with at least 14 days between inspections to ensure the opening is maintained in the closed position and sealed.
  - b. Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected at least once per calendar month with at least 14 days elapsed time between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
  - c. For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).
  - d. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 63.457(e).
  - e. The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once each calendar month, with at least 14 days elapsed time between inspections to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.
  - f. If an inspection required by Proviso 1(a)-(f) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.
    - i. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

Rule 335-3-11-.06 (18)

## Enclosures and Closed-Vent Systems Provisos

### Federally Enforceable Provisos

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- ii. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.
2. Each pulping process condensate closed collection system used to comply with 40 CFR 63.446(d) shall comply with the requirements specified in provisos 2(a) through 2(c) of this section.
- a. Each pulping process condensate closed collection system shall be visually inspected at least once each calendar month, with at least 14 days elapsed time between inspections and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.964 of subpart RR of 40 CFR Part 63, except:
    - i. Owners or operators shall comply with the recordkeeping requirements of § 63.454 instead of the requirements specified in 40 CFR § 63.964(a)(1)(vi) and (b)(3) of subpart RR of this part.
    - ii. Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in provisos (a) and (k) of 40 CFR 63.453 instead of the requirements specified in 40 CFR 63.964(a)(2) of subpart RR of this part.
  - b. Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in 40 CFR 63.446(d)(2)(i) measured initially and annually by the procedures specified in 40 CFR 63.457(d).
  - c. If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in 40 CFR 63.964(b) of subpart RR of this part shall be taken.

Rule 335-3-11-.06 (18)

### Recordkeeping and Reporting Requirements

1. The owner or operator of each affected source subject to the requirements of Subpart S shall comply with the recordkeeping requirements of 40 CFR 63.10 of Subpart A, as shown in table 1 of Subpart S and the requirements specified in Proviso 1 (a) and (b) of this section for the monitoring parameters specified in 40 CFR 63.453.
- a. For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:
    - i. Date of inspection;
    - ii. The equipment type and identification;
    - iii. Results of negative pressure tests for enclosures;
    - iv. Results of leak detection tests;
    - v. The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

Rule 335-3-11-.06 (18)

## Enclosures and Closed-Vent Systems Provisos

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- | Federally Enforceable Provisos  | Regulations |
|---|-------------|
| <ul style="list-style-type: none"><li>vi. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;</li><li>vii. Repair methods applied in each attempt to repair the defect or leak;</li><li>viii. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;</li><li>ix. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;</li><li>x. The date of successful repair of the defect or leak;</li><li>xi. The position and duration of opening of bypass line valves and the condition of any valve seals; and</li><li>xii. The duration of the use of bypass valves on computer controlled valves.</li></ul> <p>b. The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Proviso 1 of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.</p> |             |

## RICE MACT Generators Informational Summary

**Description:**

|      |  |
|------|--|
| 031A | Chlorine Dioxide Plant Emergency Power Generator |
| 031B | First Aid Emergency Power Generator              |
| 032  | Log Scales Emergency Generator                   |
| 035  | Emergency Firewater Pump Engine                  |
| 036  | No. 3 Lime Kiln Emergency Drive Engine           |

|                       |                                  |
|-----------------------|----------------------------------|
| <b>Emission Unit:</b> | <b>Installation Date:</b>        |
| 031A                  | 2012 (Model Year 2011)           |
| 031B                  | 2012 (Model Year 2011)           |
| 032                   | September 2010 (Model Year 2010) |
| 035                   | 2021 (Model Year 2021)           |
| 036                   | May 2024 (Model Year 2023)       |

|                            |            |              |              |
|----------------------------|------------|--------------|--------------|
| <b>Operating Capacity:</b> | <b>HP:</b> | <b>Type:</b> | <b>Fuel:</b> |
| 031A                       | 93 hp      | Compression  | Diesel       |
| 031B                       | 79 hp      | Compression  | Diesel       |
| 032                        | 32 hp      | Spark        | Propane      |
| 035                        | 350 hp     | Compression  | Diesel       |
| 036                        | 156 hp     | Compression  | Diesel       |

|                            |                             |                           |
|----------------------------|-----------------------------|---------------------------|
| <b>Operating Schedule:</b> | <b>Calendar Year Limit:</b> | <b>Non-Emergency Use:</b> |
| 031A                       | N/A                         | ≤ 100/50 hours/year       |
| 031B                       | N/A                         | ≤ 100/50 hours/year       |
| 032                        | N/A                         | ≤ 100/50 hours/year       |
| 035                        | N/A                         | ≤ 100/50 hours/year       |
| 036                        | N/A                         | ≤ 100/50 hours/year       |

These units contain equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

- 40 CFR Part 60 Subpart IIII (X031, X035, X036)
- 40 CFR Part 60 Subpart JJJJ (X032)
- 40 CFR Part 63 Subpart ZZZZ (All Units)

### Pollutants Emitted

| Emission Point         | Point Description   | Pollutant                           | Emission Limit  | Standard               |
|------------------------|---|-------------------------------------|---|------------------------|
| X031, X032, X035, X036 | RICE Engines  | Opacity                             | ≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one-hour period. | Rule 335-3-4-.01       |
| X031                   | ClO <sub>2</sub> Plant Emergency Power Generator; First Aid Emergency Power Generator | NMHC + NO <sub>x</sub> , CO, and PM | NMHC + NO <sub>x</sub> : 4.7 g/kW-hr<br>CO: 5.0 g/kW-hr<br>PM: 0.40 g/kW-hr                             | Rule 335-3-10-.02 (87) |

|                           |   |   |   |                                    |
|---------------------------|---|---|---|------------------------------------|
| X032                      | Log Scales<br>Emergency Generator   | HC +<br>NO <sub>x</sub> , and<br>CO       | HC + NO <sub>x</sub> : 10 g/hp-hr<br>CO: 387 g/hp-hr  | Rule 335-3-10-.02 (88)             |
| X035                      | Emergency Firewater<br>Pump Engine  | NMHC +<br>NO <sub>x</sub> , and<br>CO     | NMHC + NO <sub>x</sub> : 3.0 g/hp-hr<br>CO: 2.6 g/hp-hr<br>PM: 0.15 g/hp-hr   | Rule 335-3-10-.02 (87)             |
| X036                      | No. 3 Lime Kiln<br>Emergency Drive<br>Engine  | NMHC +<br>NO <sub>x</sub> , CO,<br>and PM | NMHC + NO <sub>x</sub> : 4.0 g/kW-hr<br>CO: 5.0 g/kW-hr<br>PM: 0.30 g/kW-hr   | Rule 335-3-10-.02 (87)             |
| X031, X035,<br>X036       | Chlorine Dioxide<br>Plant Emergency<br>Power Generator,<br>First Aid Emergency<br>Power Generator,<br>Emergency Firewater<br>Pump Engine, No. 3<br>Lime Kiln<br>Emergency Drive<br>Engine | SO <sub>2</sub>                           | ≤ 15 ppm fuel oil sulfur content  | Rule 335-3-10-.02 (87)             |
| X031, X032,<br>X035, X036 | RICE Engines  | HAPs                                      | Per 40 CFR 63.6640(f)(1)<br>maintenance checks and readiness<br>testing is limited to 100 hours per<br>year and non-emergency use is<br>limited to 50 hours per year, which<br>count towards the 100 hour per<br>year limit provided for<br>maintenance and testing. There is<br>no time limit on usage in<br>emergency situations. | Rule 335-3-10-.02 (87)<br>and (88) |

| <b>Fuel Specifications</b> |  |
|----------------------------|--|
| Sulfur content of fuel oil | < 15ppm  |
| Cetane Index               | > 40 or Maximum aromatic<br>content of 35% by volume |

## RICE MACT Generators Provisos

| Federally Enforceable Provisos   | Regulations                                       |
|--|---|
| <b>Applicability</b>   |   |
| 1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits".   | Rule 335-3-16-.03                                 |
| 2. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01 for opacity.  | Rule 335-3-4-.01                                  |
| 3. These sources are subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in 40 CFR Part 63 Subpart ZZZZ as referenced in ADEM Admin. Code R. 335-3-11-.06(103).   | Rule 335-3-11-.06 (1) and (103)                   |
| 4. Pursuant to 40 CFR 63.6590(c), Units X031, X035, and X036 must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of ADEM Admin. Code R. 335-3-10-.02(87), "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" (40 CFR Part 60 Subpart III).  | Rule 335-3-11-.06 (103)<br>Rule 335-3-10-.02 (87) |
| 5. Pursuant to 40 CFR 63.6590(c), Unit X032 must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of ADEM Admin. Code R. 335-3-10-.02(88), "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines" (40 CFR Part 60 Subpart JJJ).   | Rule 335-3-11-.06 (103)<br>Rule 335-3-10-.02 (88) |
| <b>Emission Standards</b>  |   |
| 1. These units shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average, except during one six (6) minute period in any sixty (60) minute period, these units may discharge into the atmosphere opacity not greater than forty percent (40%).  | Rule 335-3-4-.01                                  |
| 2. In accordance with 40 CFR 60.4202(a)(2) and 60.4205(b), the permittee shall not cause or allow the emissions from Unit X031 to exceed the applicable standards in Tier 3, specifically: <ul style="list-style-type: none"> <li>a. The sum of the emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NO<sub>x</sub>) shall not exceed 4.7 g/kW-hr.</li> <li>b. The carbon monoxide (CO) emission rate for this unit shall not exceed 5.0 g/kW-hr.</li> <li>c. The particulate matter (PM) emission rate for this unit shall not exceed 0.40 g/kW-hr.</li> </ul> | Rule 335-3-10-.02 (87)                            |
| 3. In accordance with 40 CFR 60.4233(d), the permittee shall not cause or allow the emissions from Unit X032 to exceed the applicable standards in Tier 3, specifically: <ul style="list-style-type: none"> <li>a. The sum of the emissions of hydrocarbons (HC) and NO<sub>x</sub> shall not exceed 10 g/hp-hr.</li> <li>b. The carbon monoxide (CO) emission rate for this unit shall not exceed 387 g/hp-hr.</li> </ul>   | Rule 335-3-10-.02 (88)                            |
| 4. In accordance with 40 CFR 60.4205(c), the permittee shall not cause or allow the emissions from Unit X035 to exceed the applicable standards in Tier 3, specifically:   | Rule 335-3-10-.02 (87)                            |



## RICE MACT Generators Provisos

| Federally Enforceable Provisos   | Regulations            |
|--|------------------------|
| <ul style="list-style-type: none"> <li>a. The sum of the emissions of NMHC and NO<sub>x</sub> shall not exceed 3.0 g/hp-hr.</li> <li>b. The carbon monoxide (CO) emission rate for this unit shall not exceed 2.6 g/hp-hr.</li> <li>c. The particulate matter (PM) emission rate for this unit shall not exceed 0.15 g/hp-hr.</li> </ul>   |                        |
| <p>5. In accordance with 40 CFR 60.4202(a)(2) and 60.4205(b), the permittee shall not cause or allow the emissions from Unit X036 to exceed the applicable standards in Tier 3, specifically:</p> <ul style="list-style-type: none"> <li>a. The sum of the emissions of NMHC and NO<sub>x</sub> shall not exceed 4.0 g/kW-hr.</li> <li>b. The carbon monoxide (CO) emission rate for this unit shall not exceed 5.0 g/kW-hr.</li> <li>c. The particulate matter (PM) emission rate for this unit shall not exceed 0.30 g/kW-hr.</li> </ul> | Rule 335-3-10-.02 (87) |
| <p>6. Pursuant to 40 CFR 60.4207(b) and 40 CFR 1090.305, the permittee shall burn diesel fuel in Units X031, X035, and X036 that meet the following per-gallon standards:</p> <ul style="list-style-type: none"> <li>a. Sulfur content shall not exceed 15 parts per million (ppm); and</li> <li>b. Cetane index shall be a minimum of 40 or the aromatic content shall not exceed 35 volume percent.</li> </ul>   | Rule 335-3-10-.02 (87) |
| <p><b>Compliance and Performance Test Methods and Procedures</b></p>   |                        |
| <p>1. Pursuant to 40 CFR 60.4211(a), Units X031, X035, and X036, shall:</p> <ul style="list-style-type: none"> <li>a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission related written maintenance instructions;</li> <li>b. Change only those emission-related settings that are permitted by the manufacturer;</li> <li>c. Keep records of conducted maintenance to demonstrate compliance.</li> </ul>  | Rule 335-3-10-.02 (87) |
| <p>2. Pursuant to 40 CFR 60.4243 (a), Unit X032 shall:</p> <ul style="list-style-type: none"> <li>a. Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions;</li> <li>b. Adjust engine settings according to and consistent with the manufacturer's instructions;</li> <li>c. Keep records of conducted maintenance to demonstrate compliance.</li> </ul>  | Rule 335-3-10-.02 (88) |
| <p>3. For Unit X035, the requirements of 40 CFR parts 89, 94, and/or 1068 shall be adhered to, as they apply.</p>  | Rule 335-3-10-.02 (87) |
| <p>4. Pursuant to 40 CFR 60.4211(f), there is no limit for use of the emergency stationary CI internal combustion engine units in emergency situations. Maintenance checks and readiness testing are limited to 100 hr/year. The unit may operate up to 50 hr/year in non-emergency situations, and these hours of use are counted towards the 100 hr/year time limit.</p>   | Rule 335-3-10-.02 (87) |

## RICE MACT Generators Provisos

| <b>Federally Enforceable Provisos</b>   | <b>Regulations</b>                                       |
|---|--|
| <p>5. Pursuant to 40 CFR 60.4243(d), there is no limit for use of the emergency stationary SI internal combustion engine units in emergency situations. Maintenance checks and readiness testing are limited to 100 hr/year. The unit may operate up to 50 hr/year in non-emergency situations, and these hours of use are counted towards the 100 hr/year time limit.</p>  | Rule 335-3-10-.02 (88)                                   |
| <p>6. For these units, Method 9 as defined in 40 CFR 60, Appendix A, shall be used in the determination of the opacity of the stack emissions.</p>  | Rule 335-3-4-.01 (2)                                     |
| <b>Emission Monitoring</b>  |  |
| <p>1. Pursuant to 40 CFR 60.4209, the facility must install a non-resettable hour meter on Units X031, X035, and X036 and monitor all compression ignition units according to the requirements of 40 CFR 60.4211(f).</p>  | Rule 335-3-10-.02 (87)                                   |
| <p>2. The facility must install a non-resettable hour meter on Unit X032, pursuant to 40 CFR 60.4237(c), and monitor the spark ignition units according to the requirements of 40 CFR 60.4243(d).</p>   | Rule 335-3-10-.02 (88)                                   |
| <b>Recordkeeping and Reporting Requirements</b>   |  |
| <p>1. To demonstrate compliance with the operational limitations, the permittee shall maintain records of the date, time, duration, and purpose of operation each time these units are operated. These records shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of five (5) years from the date of generation of each record.</p> | <p>Rule 335-3-10-.02 (87)<br/>Rule 335-3-10-.02 (88)</p> |
| <p>2. To demonstrate compliance with the fuel limitations, the permittee shall only purchase fuels subject to meeting the fungible specifications for diesel fuel. Records of these fuel purchases shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of five (5) years from the date of generation of each record.</p>             | Rule 335-3-10-.02 (87)                                   |

## Sources Subject Only to the General Provisos Informational Summary

**Description:**

**Emission Unit No:**

**Installation Date:**

**Reconstruction/Modification Date:**

**Operating Capacity:**

**Operating Schedule:** 8760 hours/year

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

### Pollutants Emitted

Emission limitations:

| Description   | Regulation       |
|---|------------------|
| Wood Handling (fugitives)                                   | General Provisos |
| Brown Stock High Density Storage Chests                     | General Provisos |
| Dregs Filter Hood   | General Provisos |
| Pulp Dryer  | General Provisos |
| No. 1 Board Mill  | General Provisos |
| Weak Black Liquor Storage Tanks                             | General Provisos |
| White Liquor Clarifier                                      | General Provisos |
| Lime Slaker and Caustizers                                  | General Provisos |
| Green Liquor Clarifier                                      | General Provisos |
| Soap Skimmer Tanks  | General Provisos |
| Soap Storage Tanks  | General Provisos |
| Salt Cake Mix Tank  | General Provisos |
| Landfill (fugitives)  | General Provisos |
| Wastewater Treatment Lagoons (fugitives)                    | General Provisos |
| Heavy Black Liquor Storage Tank                             | General Provisos |
| Methanol Storage Tank                                       | General Provisos |
| Lime Mud Precoat Filters                                    | General Provisos |
| Lime Mud Precoat Filter Vacuum Pumps                        | General Provisos |
| Lime Handling System with Dust Collector                    | General Provisos |
| No. 4 Power Boiler Sorbent Silo with Dust Collector         | General Provisos |
| No. 4 Power Boiler Activated Caron Silo with Dust Collector | General Provisos |
| No. 4 Power Boiler Fly Ash Silo with Dust Collector         | General Provisos |

## Fugitive Dust Plan Informational Summary

**Description:** Fugitive Dust Plan

**Emission Unit No:** N/A

**Installation Date:** N/A                      **Reconstruction/Modification Date:** N/A

**Operating Schedule:** 8760 hours/year

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

### Pollutants Emitted

Emission limitations:

| <b>Emission Point</b> | <b>Point Description</b> | <b>Pollutant</b> | <b>Emission Limit</b> | <b>Standard</b>  |
|-----------------------|--------------------------|------------------|-----------------------|------------------|
| Fugitive              | Fugitive Dust            | PM               | N/A                   | Rule 335-3-4-.02 |

## Fugitive Dust Plan Provisos

| <b>State Only Enforceable Provisos</b>   | <b>Regulations</b> |
|--|--------------------|
| <p><b>Applicability (State Only)</b></p> <p>1. These sources are subject to the applicable requirements of ADEM Admin. Code 335-3-16-.03, "Major Source Operating Permits".</p>  | Rule 335-3-16-.03  |
| <p><b>Emission Standards (State Only)</b></p> <p>1. The facility shall take reasonable precautions as directed in Proviso 1 of "Compliance and Performance Test Methods and Procedures" below to prevent fugitive dust at the facility which travel beyond the facility property line and cause a nuisance.</p>  | Rule 335-3-4-.02   |
| <p><b>Compliance and Performance Test Methods and Procedures (State Only)</b></p> <p>1. The facility shall utilize the Facility Dust Plan submitted on June 17, 2025 (Appendix A), in order to minimize and address fugitive dust emissions.</p>   | Rule 335-3-16-.07  |
| <p><b>Emission Monitoring (State Only)</b></p> <p>1. The facility shall conduct weekly visual observations for fugitive dust in areas listed with potential to generate fugitive dust, considering factors such as naturally wet conditions. If visible emissions traveling beyond the facility property line are observed, any necessary corrective actions shall be initiated within 4 hours of observation.</p>   | Rule 335-3-16-.05  |
| <p><b>Recordkeeping and Reporting Requirements (State Only)</b></p> <p>1. The facility shall maintain a record of all inspections, to include visible observations performed to satisfy the requirements of Proviso 1 of "Emission Monitoring" of this Permit. This shall include problems observed and corrective actions taken. The records shall be retained for at least five years from the date of generation and shall be available upon request.</p> | Rule 335-3-16-.05  |

# Fugitive Dust Management Plan

## Introduction

WestRock Mill Company, LLC operates a bleached Kraft pulp and paperboard mill in Demopolis, Marengo County, Alabama (Demopolis Mill), which is a major air emissions source under the Title V Major Source Operating Permit program and the Prevention of Significant Deterioration (PSD) permitting program. The Demopolis Mill operates under Title V Major Source Operating Permit No. 105- 0001 issued by the Alabama Department of Environmental Management (ADEM). This plan has been developed at the request of ADEM to satisfy the objectives outlined below.

## Plan Objectives

The Demopolis Mill's Fugitive Dust Management Plan will identify control measures and practices to minimize and manage fugitive dust from applicable sources where it is reasonably practical to do so. "Fugitive dust" can generally be defined as filterable particulate matter (PM) that enters the atmosphere without first passing through a stack or duct designed to direct or control its flow. The Fugitive Dust Management Plan defines the following:

- Procedures that Demopolis Mill personnel will follow to monitor and control emissions where necessary.
- Steps that the Demopolis Mill will take to minimize fugitive dust emissions and demonstrate that corrective procedures are followed in the event that reasonably avoidable fugitive emissions are observed.

To meet these objectives, the Fugitive Dust Management Plan identifies the following:

- Potential sources of fugitive dust within the facility
- Primary control measures and practices to manage and minimize fugitive emissions

| Identified Dust Sources             | Primary Controls   | Practices   |
|-------------------------------------|--|---|
| Paved Roads                         | <ul style="list-style-type: none"> <li>• Speed limit (paved roads) of 15 mph.</li> <li>• Dust suppression via watering as needed.</li> </ul>   | <ul style="list-style-type: none"> <li>• Operation of water truck as needed</li> </ul>  |
| Unpaved Roads/<br>Landfill          | <ul style="list-style-type: none"> <li>• Speed limit (unpaved roads) of 15 mph.</li> <li>• Dust suppression via watering as needed.</li> <li>• Application of long-term dust suppressant polymer as needed.</li> <li>• Routine inspection of road surfaces/landfill for necessary corrective actions.</li> </ul> | <ul style="list-style-type: none"> <li>• Operation of water truck as needed</li> </ul>  |
| Mobile Equipment/ Material Handling | <ul style="list-style-type: none"> <li>• Boiler fly ash is loaded directly into dump trucks (no storage pile)</li> <li>• Conveyors handling wood shall be covered</li> </ul>   | <ul style="list-style-type: none"> <li>• Add water to boiler fly ash as it is loaded</li> <li>• Operation of water truck as needed</li> <li>• Maintain covers on wood handling conveyors</li> </ul> |
| Storage Piles                       | <ul style="list-style-type: none"> <li>• Bark piles are near 50% moisture</li> <li>• Chip piles are over 40% moisture</li> </ul>   |   |