



A27S 008D 3-01

MAJOR SOURCE OPERATING PERMIT

PERMITTEE: WELLBORN CABINET, INC.
FACILITY NAME: WELLBORN CABINET, INC.
FACILITY/PERMIT NO.: 304-S008
LOCATION: ASHLAND, CLAY COUNTY, ALABAMA

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

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

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Alabama Department of Environmental Management

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1. General Permit Provisos

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

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

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<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>11. Compliance Provisions</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>ADEM Admin. Code r. 335-3-16-.07(c)</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>12. Compliance Certification</p>	
<p>The permittee shall submit a complete and accurate compliance certification by December 13th of each year for each annual reporting period of this permit (i.e. October 14th-October 13th).</p>	<p>ADEM Admin. Code r. 335-3-16-.07(e)</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 ADEM Admin. Code r. 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements);</p>	
<p>(4) Whether compliance has been continuous or intermittent;</p>	
<p>(5) Such other facts as the Air Division 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 Air Division P.O. Box 301463 Montgomery, AL 36130-1463 and to:</p>	
<p style="text-align: center;">Air and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303</p>	
<p>13. Reopening for Cause</p>	
<p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p>	<p>ADEM Admin. Code r. 335-3-16-.13(5)</p>

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<p>(a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.</p> <p>(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.</p> <p>(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</p> <p>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	
<p>14. Additional Rules and Regulations</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>15. Equipment Maintenance or Breakdown</p> <p>(a) In case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Air Division at least (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:</p> <ol style="list-style-type: none"> (1) Identification of the specific facility to be taken out of service as well as its location and permit number; (2) The expected length of time that the air pollution control equipment will be out of service; (3) The nature and quality of emissions of air contaminants likely to occur during the shutdown period; (4) Measures such as the use of of-shift labor and equipment that will be taken to minimize the length of the shutdown period; 	<p>ADEM Admin. Code r. 335-3-1-.07(1),(2)</p>

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<p>(5) The reasons that it would be impossible or impractical to shut down the sources operation during the maintenance period.</p> <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.</p>	
<p>16. Operation of Capture and Control Devices</p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p>17. Obnoxious Odors</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>ADEM Admin. Code r. 335-3-1-.08</p>
<p>18. Fugitive Dust</p> <p>Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>Plant or haul roads and grounds shall 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>(a) 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>(b) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;</p> <p>(c) By paving;</p> <p>(d) 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>ADEM Admin. Code r. 335-3-4-.02</p>

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<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. Alternative methods shall be approved by the Air Division prior to utilization.</p>	
<p>19. Additions and Revisions</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>ADEM Admin. Code r. 335-3-16-.13 and 335-3-16-.14</p>
<p>20. Recordkeeping Requirements</p>	
<p>(a) Records of required monitoring information of the source shall include the following:</p> <ul style="list-style-type: none">(1) The date, place, and time of all sampling or measurements;(2) The date analyses were performed;(3) The company or entity that performed the analyses;(4) The analytical techniques or methods used;(5) The results of all analyses; and(6) The operating conditions that existed at the time of sampling or measurement. <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)2.</p>
<p>21. Reporting Requirements</p>	
<p>(a) Reports to the Air Division of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with ADEM Admin. Code r. 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 shall include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)3.</p>

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<p>22. Emission Testing Requirements</p> <p>Each point of emission which requires testing shall be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.</p> <p>To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:</p> <ul style="list-style-type: none">(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures requires probe cleaning).(c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances. <p>A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	<p>ADEM Admin. Code r. 335-3-1-.05(3) and 335-3-1-.04(1)</p> <p>ADEM Admin. Code r. 335-3-1-.04</p> <p>ADEM Admin. Code r. 335-3-1-.04</p>
<p>23. Payment of Emission Fees</p> <ul style="list-style-type: none">(a) The permittee shall remit the annual Operating Permit Fees required by ADEM Admin. Code r. 335-1-7-.04 according to the schedule in ADEM Admin. Code r. 335-1-7-.05.(b) The permittee shall submit its estimate of actual emissions for the previous calendar year according to the schedule in ADEM Admin. Code r. 335-1-7-.05.	<p>ADEM Admin. Code r. 335-1-7-.05</p> <p>ADEM Admin. Code r. 335-1-7-.05</p>

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<p>24. Other Reporting and Testing Requirements</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>ADEM Admin. Code r. 335-3-1-.04(1)</p>
<p>25. Title VI Requirements (Refrigerants)</p> <p>(a) 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>(b) No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.</p> <p>(c) 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>ADEM Admin. Code r. 335-3-16-.05(a)</p>
<p>26. Chemical Accidental Prevention Provisions</p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <p>(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.</p> <p>(b) The owner or operator shall submit one of the following:</p> <p>(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or,</p> <p>(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.</p>	<p>40 CFR Part 68</p>
<p>27. Display of Permit</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 shall make the permit readily available for inspection by any or all persons who may request to see it.</p>	<p>ADEM Admin. Code r. 335-3-14-.01(1)(d)</p>

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<p>28. Circumvention</p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	<p>ADEM Admin. Code r. 335-3-1-.10</p>
<p>29. Visible Emissions</p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>ADEM Admin. Code r. 335-3-4-.01(1)</p>
<p>30. Fuel-Burning Equipment</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 ADEM Admin. Code r. 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 ADEM Admin. Code r. 335-3-5-.01.</p>	<p>ADEM Admin. Code r. 335-3-4-.03</p> <p>ADEM Admin. Code r. 335-3-5-.01</p>
<p>31. Process Industries – General</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 ADEM Admin. Code r. 335-3-4-.04.</p>	<p>ADEM Admin. Code r. 335-3-4-.04</p>
<p>32. Averaging Time for Emission Limits</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>ADEM Admin. Code r. 335-3-1-.05</p>
<p>33. Open Burning</p> <p>Precautions should be taken to ensure that no person shall ignite, cause to ignite, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.</p>	<p>ADEM Admin. Code r. 335-3-3-.01</p>

Emission Unit No. 001 (OVERHEAD LINE NO. 1)

Operating Permit Summary No. 1

Emission Unit(s): Wooden Furniture Surface Coating, Unit 001

Designation No(s) in Application: Overhead Line No. 1

Description: Two (2) Stain booths, Four (4) Sealer booths, One (1) Topcoat booth, One (1) Glaze booth, and Three (3) Drying Ovens. The total booth count is eight (8) and the ovens are shared with Lines 3 and 4.

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS
 Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
PM	LIMIT ON TRANSFER EFFICIENCY	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.8 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of:	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.
5. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	<u>0.11</u>
Stains	<u>7.20</u>	<u>6.80</u>
Sealers	<u>5.00</u>	<u>4.50</u>
Topcoats	<u>7.20</u>	<u>5.00</u>
Toners	<u>4.30</u>	<u>4.15</u>
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

6. The stains shall be applied with high volume low pressure (HVLP) spray equipment or equipment with an equivalent transfer efficiency (TE) of 65% or greater. Air Pressure shall not exceed 10 psig in HVLP spray equipment at application. Other application technology may be substituted if approved by the Department in writing in advance. Testing of TE may be required. The sealers and topcoats will be applied with air assisted airless spray equipment or equipment with an equivalent transfer efficiency of 65% or greater. ADEM Admin. Code R. 335-3-14-.04(8)
7. Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers. ADEM Admin. Code R. 335-3-14-.04(8)
8. Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth. ADEM Admin. Code R. 335-3-14-.04(8)
9. Ovens for these units shall use heat supplied by permitted boilers. Natural gas may be used as a backup fuel for up to 1000 hours per consecutive rolling 12-month period on the Overhead Line No. 1, Overhead Line No. 2, and Flat Line No. 3. Records will be kept of the time the natural gas is being fired. ADEM Admin. Code R. 335-3-14-.04(8)
10. Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually. ADEM Admin. Code R. 335-3-14-.04(8)

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| 11. | All flat sheet stock shall utilize the UV coating process. All other pieces that are technically and economically able to use this process shall do so as described in Wellborn's letter of July 12, 1995. | ADEM Admin. Code R. 335-3-14-.04(8) |
| 12. | This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.803 (a) through (l). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R. 335-3-1-.05 |
| 2. | Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R. 335-3-1-.05 |
| 3. | This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.805 (a). | ADEM Admin. Code R. 335-3-11-.06(35) |
| 4. | This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.804 (a) through (c), (f), and (g). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 4--Emission Monitoring

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| 1. | The VOC monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R. 335-3-1-.04 |
| 2. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating | ADEM Admin. Code R. 335-3-1-.04 |

line.

Section 5--Recordkeeping and Reporting Requirements

ADEM Admin. Code R. 335-3-1-04

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:
 - (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
 - (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
 - (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of

pounds and tons.

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| 2. | A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.806 (a) through (e), and (h) through (j). | ADEM Admin. Code R.
335-3-11-.06(35) |
| 4. | This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.807 (a) through (c), and (e). | ADEM Admin. Code
R. 335-3-11-.06(35) |
| 5. | A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. | ADEM Admin. Code
R. 335-3-1-.04 |

Emission Unit No. 002 (OVERHEAD LINE NO. 2)

Operating Permit Summary No. 2

Emission Unit(s): Wooden Furniture Surface Coating,
Unit 002

Designation No(s). in Application: Overhead Line No. 2

Description: Six (6) Stain booths, Seven (7) Sealer booths,
Two (2) Topcoat booths, One (1) Toner booth, Two (2) Glaze booths, and Three (3) Drying Ovens

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:
Primary: STEAM FROM BOILERS
Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
PM	LIMIT ON TRANSFER EFFICIENCY	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.8 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of ...: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.

ADEM Admin. Code
R. 335-3-14-.04(8)

5. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	0.11
Stains	7.20	6.80
Sealers	5.00	4.50
Topcoats	7.20	5.00
Toners	4.30	4.15
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

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| 6. | The stains shall be applied with high volume low pressure (HVLP) spray equipment or equipment with an equivalent transfer efficiency (TE) of 65% or greater. Air Pressure shall not exceed 10 psig in HVLP spray equipment at application. Other application technology may be substituted if approved by the Department in writing in advance. Testing of TE may be required. The sealers and topcoats will be applied with air assisted airless spray equipment or equipment with an equivalent transfer efficiency of 65% or greater. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 7. | Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 8. | Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 9. | Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 10. | All flat sheet stock shall utilize the UV coating process. All other pieces that are technically and economically able to use this process shall do so as described in Wellborn's letter of July 12, 1995. | ADEM Admin. Code
R. 335-3-14-.04(8) |

11. This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.803 (a) through (l). ADEM Admin. Code R. 335-3-11-.06(35)

Section 3--Compliance and Performance Test Methods and Procedures

1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. ADEM Admin. Code R. 335-3-1-.05
2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. ADEM Admin. Code R. 335-3-1-.05
3. This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.805 (a). ADEM Admin. Code R. 335-3-11-.06(35)
4. This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.804 (a) through (c), (f), and (g). ADEM Admin. Code R. 335-3-11-.06(35)

Section 4--Emission Monitoring

1. The VOC monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. ADEM Admin. Code R. 335-3-1-.04
2. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating line. ADEM Admin. Code R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be ADEM Admin. Code R. 335-3-1-.04

maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:

- (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
- (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
- (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
- (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
- (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.

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| <p>2. A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.</p> | <p>ADEM Admin. Code R.
335-3-1-.04</p> |
| <p>3. This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.806 (a) through (e), and (h) through (j).</p> | <p>ADEM Admin. Code R.
335-3-11-.06(35)</p> |
| <p>4. This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.807 (a) through (c), and (e).</p> | <p>ADEM Admin. Code R.
335-3-11-.06(35)</p> |
| <p>5. A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance.</p> | <p>ADEM Admin. Code R.
335-3-1-.04</p> |

Emission Unit No. 003 (OVERHEAD LINE NO. 3)

Operating Permit Summary No. 3

Emission Unit(s): Wooden Furniture Surface Coating,
Unit 003

Designation No(s). in Application: Overhead Line No. 3

Description: Five (5) Stain booths, Seven (7) Sealer booths, Two (2) Topcoat booths, Two (2) Glaze booths, and Three (3) Drying Ovens

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:
Primary: STEAM FROM BOILERS
Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
PM	LIMIT ON TRANSFER EFFICIENCY	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.8 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of :	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.
5. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	0.11
Stains	7.20	6.80
Sealers	5.00	4.50
Topcoats	7.20	5.00
Toners	4.30	4.15
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

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| 6. | The stains shall be applied with high volume low pressure (HVLP) spray equipment or equipment with an equivalent transfer efficiency (TE) of 65% or greater. Air Pressure shall not exceed 10 psig in HVLP spray equipment at application. Other application technology may be substituted if approved by the Department in writing in advance. Testing of TE may be required. The sealers and topcoats will be applied with air assisted airless spray equipment or equipment with an equivalent transfer efficiency of 65% or greater. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 7. | Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 8. | Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 9. | Ovens for these units shall use heat supplied by permitted boilers. Natural gas may be used as a backup fuel for up to 1000 hours per consecutive rolling 12-month period on the Overhead Line No. 1, Overhead Line No. 2, and Flat Line No. 3. Records will be kept of the time the natural gas is being fired. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 10. | Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually. | ADEM Admin. Code
R. 335-3-14-.04(8) |

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| 11. | All flat sheet stock shall utilize the UV coating process. All other pieces that are technically and economically able to use this process shall do so as described in Wellborn's letter of July 12, 1995. | ADEM Admin. Code R. 335-3-14-.04(8) |
| 12. | This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.803 (a) through (l). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R. 335-3-1-.05 |
| 2. | Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R. 335-3-1-.05 |
| 3. | This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.805 (a). | ADEM Admin. Code R. 335-3-11-.06(35) |
| 4. | This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.804 (a) through (c), (f), and (g). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 4--Emission Monitoring

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| 1. | The VOC monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R. 335-3-1-.04 |
| 2. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating | ADEM Admin. Code R. 335-3-1-.04 |

line.

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:
 - (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
 - (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
 - (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of

ADEM Admin. Code R.
335-3-1-.04

pounds and tons.

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| 2. | A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.806 (a) through (e), and (h) through (j). | ADEM Admin. Code R.
335-3-11-.06(35) |
| 4. | This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.807 (a) through (c), and (e). | ADEM Admin. Code
R. 335-3-11-.06(35) |
| 5. | A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. | ADEM Admin. Code
R. 335-3-1-.04 |

Emission Unit No. 004 (FLAT LINE NO. 4)

Operating Permit Summary No. 4

Emission Unit(s): Wooden Furniture Surface Coating, Unit 004

Designation No(s). in Application: Flat Line No. 4

Description: One (1) Stain booth, One (1) Sealer booth, One (1) Topcoat booth, and Two (2) Drying Ovens

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:
 Primary: STEAM FROM BOILERS
 Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
PM	LIMIT ON TRANSFER EFFICIENCY	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.8 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of :	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.
5. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	0.11
Stains	7.20	6.80
Sealers	5.00	4.50
Topcoats	7.20	5.00
Toners	4.30	4.15
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

6. The stains shall be applied with high volume low pressure (HVLP) spray equipment or equipment with an equivalent transfer efficiency (TE) of 65% or greater. Air Pressure shall not exceed 10 psig in HVLP spray equipment at application. Other application technology may be substituted if approved by the Department in writing in advance. Testing of TE may be required. The sealers and topcoats will be applied with air assisted airless spray equipment or equipment with an equivalent transfer efficiency of 65% or greater. ADEM Admin. Code R. 335-3-14-.04(8)
7. Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers. ADEM Admin. Code R. 335-3-14-.04(8)
8. Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth. ADEM Admin. Code R. 335-3-14-.04(8)
9. Ovens for these units shall use heat supplied by permitted boilers. Natural gas may be used as a backup fuel for up to 1000 hours per consecutive rolling 12-month period on the Overhead Line No. 1, Overhead Line No. 2, and Flat Line No. 3. Records will be kept of the time the natural gas is being fired. ADEM Admin. Code R. 335-3-14-.04(8)
10. Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually. ADEM Admin. Code R. 335-3-14-.04(8)

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| 11. | All flat sheet stock shall utilize the UV coating process. All other pieces that are technically and economically able to use this process shall do so as described in Wellborn's letter of July 12, 1995. | ADEM Admin. Code R. 335-3-14-.04(8) |
| 12. | This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.803 (a) through (l). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R. 335-3-1-.05 |
| 2. | Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R. 335-3-1-.05 |
| 3. | This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.805 (a). | ADEM Admin. Code R. 335-3-11-.06(35) |
| 4. | This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.804 (a) through (c), (f), and (g). | ADEM Admin. Code R. 335-3-11-.06(35) |

Section 4--Emission Monitoring

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| 1. | The VOC monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R. 335-3-1-.04 |
| 2. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating | ADEM Admin. Code R. 335-3-1-.04 |

line.

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:
 - (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
 - (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
 - (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of

ADEM Admin. Code R.
335-3-1-.04

pounds and tons.

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| 2. | A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.806 (a) through (e), and (h) through (j). | ADEM Admin. Code R.
335-3-11-.06(35) |
| 4. | This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.807 (a) through (c), and (e). | ADEM Admin. Code
R. 335-3-11-.06(35) |
| 5. | A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. | ADEM Admin. Code
R. 335-3-1-.04 |

Emission Unit No. 005 (FLAT LINE NO. 5)

Operating Permit Summary No. 5

Emission Unit(s): Wooden Furniture Surface Coating,
Unit 005

Designation No(s). in Application: Flat Line No. 5

Description: One (1) Stain booth, One (1) Sealer booth,
One (1) Topcoat booth, One (1) Drying Oven
and Three (3) Off-line booths

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:
Primary: STEAM FROM BOILERS
Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
PM	LIMIT ON TRANSFER EFFICIENCY	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.8 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of :	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.

ADEM Admin. Code
R. 335-3-14-.04(8)

5. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	0.11
Stains	7.20	6.80
Sealers	5.00	4.50
Topcoats	7.20	5.00
Toners	4.30	4.15
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

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| 6. | The stains shall be applied with high volume low pressure (HVLP) spray equipment or equipment with an equivalent transfer efficiency (TE) of 65% or greater. Air Pressure shall not exceed 10 psig in HVLP spray equipment at application. Other application technology may be substituted if approved by the Department in writing in advance. Testing of TE may be required. The sealers and topcoats will be applied with air assisted airless spray equipment or equipment with an equivalent transfer efficiency of 65% or greater. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 7. | Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 8. | Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 9. | Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually. | ADEM Admin. Code
R. 335-3-14-.04(8) |
| 10. | All flat sheet stock shall utilize the UV coating process. All other pieces that are technically and economically able to use this process shall do so as described in Wellborn's letter of July 12, 1995. | ADEM Admin. Code
R. 335-3-14-.04(8) |

11. This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.803 (a) through (l).

ADEM Admin. Code
R. 335-3-11-.06(35)

Section 3--Compliance and Performance Test Methods and Procedures

1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions.
2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
3. This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.805 (a).
4. This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.804 (a) through (c), (f), and (g).

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-11-.06(35)

ADEM Admin. Code
R. 335-3-11-.06(35)

Section 4--Emission Monitoring

1. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.
2. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating line.

ADEM Admin. Code R.
335-3-1-.04

ADEM Admin. Code
R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be

ADEM Admin. Code R.
335-3-1-.04

maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:

- (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
- (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
- (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
- (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
- (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.

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| 2. | A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.806 (a) through (e), and (h) through (j). | ADEM Admin. Code R.
335-3-11-.06(35) |
| 4. | This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.807 (a) through (c), and (e). | ADEM Admin. Code
R. 335-3-11-.06(35) |
| 5. | A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. | ADEM Admin. Code
R. 335-3-1-.04 |

Emission Unit No. 006 (UV PANEL COATER LINE NO. 6)

Operating Permit Summary No. 6

Emission Unit(s): Wooden Furniture Surface Coating
Designation No(s). in UV Panel Coater No. 6.
Application:
Description: (Panel) Two (2) Sealer areas, One (1) Topcoat area, and One (1)

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: None
Secondary: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	NONE	NONE
HAPs	NONE	NONE

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. These sources are subject to the applicable requirement of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16-.03
<i>Section 2--Emission Standards</i>	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. The VOCs content by weight of each VOC containing material used shall be determined using EPA Test Method 24, as defined in 40 CFR 60, Appendix A. Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-1-.05
2. The HAPs content by weight of each HAPs containing material used shall be determined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A. Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-1-.05
<i>Section 4--Emission Monitoring</i>	
1. The monitoring requirements in this permit section shall be as required in Section 5--Recordkeeping and Reporting Requirements.	
<i>Section 5--Recordkeeping and Reporting Requirements</i>	
1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the	ADEM Admin. Code R. 335-3-1-.04

following information:

- (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
- (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
- (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
- (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons.
- (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.

Emission Unit No. 007 (UV MOLD COATER)

Operating Permit Summary No. 7

Emission Unit(s): Wooden Furniture Surface Coating
Designation No(s). in UV Mold Coater, Unit 007
Application:
Description: Two (2) Topcoat areas and One (1) Dryer

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: None
Secondary: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	NONE	NONE
HAPs	NONE	NONE

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. These sources are subject to the applicable requirement of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16-.03
<i>Section 2--Emission Standards</i>	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. The VOCs content by weight of each VOC containing material used shall be determined using EPA Test Method 24, as defined in 40 CFR 60, Appendix A. Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-1-.05
2. The HAPs content by weight of each HAPs containing material used shall be determined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A. Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-1-.05
<i>Section 4--Emission Monitoring</i>	
1. The monitoring requirements in this permit section shall be as required in Section 5--Recordkeeping and Reporting Requirements.	
<i>Section 5--Recordkeeping and Reporting Requirements</i>	
1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the	ADEM Admin. Code R. 335-3-1-.04

following information:

- (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
- (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
- (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
- (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons.
- (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.

**Emission Unit No. 008 (Automated Reciprocating Sprayer (ARS)
with Electrical Oven)**

Operating Permit Summary No. 8

Emission Unit(s): Wooden Furniture Surface Coating
Designation No(s). in Application: ARS Booth with Steam and Electrical Ovens, Unit 008

Description: One (1) ARS Line, One (1) Steam Oven and One (1) Electrical Oven

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: None
 Secondary: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	39.9 TPY	Synthetic Minor PSD
HAPs	0.8 LB VHAP/POUND SOLIDS AT THE APPLICATOR FOR ALL COATINGS	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of:	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.8 pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from the ARS Line shall not exceed 39.9 tons per year (TPY), and all surface coating operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted. These emissions are not only limited to coating, storage, cleanup, and etc.
5. This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ§63.803 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.803 (a) through (l).

ADEM Admin. Code
R. 335-3-14-.04(8)

6. The VOC content of the coatings used on this unit shall not exceed the following maximums nor shall they exceed the average VOC content per coating type averaged over any calendar month.

ADEM Admin. Code
R. 335-3-14-.04(8)

Coating Type	Maximum in lbs VOC/ gal of coating	Monthly Average VOC content in lbs VOC/gal coating
UV Coatings	0.11	0.11
Stains	7.20	6.80
Sealers	5.00	4.50
Topcoats	7.20	5.00
Toners	4.30	4.15
Glazes	6.50	6.35

Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.

Section 3—Compliance and Performance Test Methods and Procedures

- Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions.
- Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
- This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.805 (a).
- This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.804 (a) through (c), (f), and (g).

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-11-.06(35)

ADEM Admin. Code
R. 335-3-11-.06(35)

Section 4--Emission Monitoring

1. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. ADEM Admin. Code R. 335-3-1-.04
2. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating line. ADEM Admin. Code R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information: ADEM Admin. Code R. 335-3-1-.04
 - (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
 - (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.

- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
 - (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.
2. A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. ADEM Admin. Code R. 335-3-1-.04
 3. This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.806 (a) through (e), and (h) through (j). ADEM Admin. Code R. 335-3-11-.06(35)
 4. This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.807 (a) through (c), and (e). ADEM Admin. Code R. 335-3-11-.06(35)
 5. A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. ADEM Admin. Code R. 335-3-1-.04

**Emission Unit No. 010 (WOOD FURNITURE ADHESION)
Operating Permit Summary No. 10**

Emission Unit(s): Wooden Furniture Surface Coating,
Unit 010

Designation No(s). in Application: Wood Furniture Adhesion Operations,
Line No. 10

Description: 010A. Particle Board Lamination
010B. Door Panel
010C. Face Frame
010D. Miscellaneous Product Lamination
010E. Final Assembly Lines #1-#5

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:
Primary: NONE
Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	MAXIMUM AND AVERAGE VOC LIMITS	PSD-BACT
VOCs	GOOD WORK PRACTICES	PSD-BACT
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT
HAPs	0.2 LB VHAPS/POUND SOLIDS AT THE APPLICATOR FOR ALL ADHESIVES	MACT JJ
Opacity	20% as determined by a 6 minute average	SIP
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
4. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as a "New Source" and the General Provisions in Subpart A, Table 1.	ADEM Admin. Code R. 335-3-11-.06(35)
5. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of:	ADEM Admin. Code R. 335-3-4-.04
$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr	

3. This source is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code
R. 335-3-11-.06(35)

This facility shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

4. Emission of Volatile Organic Compounds (VOCs) from all surface coating operations facility-wide including, but not limited to coating, storage, cleanup, etc., shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period based on the premise that all VOCs applied are emitted.

ADEM Admin. Code
R. 335-3-14-.04(8)

5. Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed airtight containers.

ADEM Admin. Code
R. 335-3-14-.04(8)

6. Particulate (PM) filters or water-wall filters shall be used on all coating booth areas where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth.

ADEM Admin. Code
R. 335-3-14-.04(8)

7. Wellborn will utilize new technology if it becomes technically and economically feasible. Wellborn shall continue to investigate the feasibility of utilizing lower solvent coatings, high solids coatings, waterborne coatings, and other lower VOC content coatings by continued experimentation and trials with new coatings and through continued contact with coating suppliers. Progress in the search for lower VOC content coatings shall be summarized in a report along with the fourth quarter report of VOC emissions annually.

ADEM Admin. Code
R. 335-3-14-.04(8)

8. This facility is subject to the applicable work practice standards of 40 CFR Part 63 Subpart JJ §63.803 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.803 (a) through (l).

ADEM Admin. Code
R. 335-3-11-.06(35)

Section 3--Compliance and Performance Test Methods and Procedures

1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions.
2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
3. This source is subject to the applicable testing methods of 40 CFR Part 63 Subpart JJ §63.805, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.805 (a).
4. This source is subject to the applicable compliance procedures of 40 CFR Part 63 Subpart JJ §63.804, “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.804 (a) through (c), (f), and (g).

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-1-.05

ADEM Admin. Code
R. 335-3-11-.06(35)

ADEM Admin. Code
R. 335-3-11-.06(35)

Section 4--Emission Monitoring

1. The VOC monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.
2. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the coating line(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the coating line.

ADEM Admin. Code
R. 335-3-1-.04

ADEM Admin. Code
R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption, which record at least the last five years of data, will be

ADEM Admin. Code R.
335-3-1-.04

maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:

- (a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.
- (b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
- (d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
- (e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
- (f) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons
- (g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.

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| 2. | A log book of the daily visible observations and records of coating line inspections and appropriate maintenance actions required in proviso 4.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | This source is subject to the applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.806 (a) through (e), and (h) through (j). | ADEM Admin. Code R.
335-3-11-.06(35) |
| 4. | This source is subject to the applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.807 (a) through (c), and (e). | ADEM Admin. Code
R. 335-3-11-.06(35) |
| 5. | A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance. | ADEM Admin. Code
R. 335-3-1-.04 |

Emission Unit No. 011 (Two (2) Automated Spray Lines (ASL), Regenerative Thermal Oxidizer (RTO) and the existing Baghouse #3)

Operating Permit Summary No. 11

Emission Unit(s): X011

Designation No(s): Lines # 001 and # 002

Description: Two (2) Automated Spray Lines (ASL), Regenerative Thermal Oxidizer (RTO) and an existing Baghouse #3: Lines # 001 and # 002, each with [brush sander, duster, reciprocating spray machine and an electric oven], RTO – [5.0 MMBtu/hr natural gas fired]

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8,760 hr/yr

Type and quantity of fuel used: Primary – Natural Gas
Secondary – None

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	39.5 tons of VOCs per rolling 12-month period	Synthetic Minor PSD
PM/PM ₁₀	24.5/14.5/9.5 tons per rolling 12-month period	Synthetic Minor PSD

Unit Specific Provisos

Regulations

1. Applicability

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| <p>1. This Unit is subject to the applicable requirements of ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits".</p> | <p>ADEM Admin. Code R. 335-3-16-.01</p> |
| <p>2. This Unit is subject to a PSD synthetic minor emission limitations</p> | <p>ADEM Admin. Code R. 335-3-14-.04</p> |
| <p>3. This Unit is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits."</p> | <p>ADEM Admin. Code R. 335-3-16-.03</p> |
| <p>4. This Unit is subject to the applicable requirements of ADEM Admin. Code R. 335-3-11-.06(35), "National Emission Standards for Wood Furniture Manufacturing Operations" as an "Existing Source" and the General Provisions in Subpart A, Table 1.</p> | <p>ADEM Admin. Code R. 335-3-11-.06(35)</p> |

2. Emission Standards

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| <p>1. Emissions of Volatile Organic Compounds (VOC) for Unit X011 shall not exceed 39.5 tons per year (TPY), in any consecutive rolling 12-month period.</p> | <p>ADEM Admin. Code R. 335-3-14-.04(8)</p> |
| <p>2. Emission of Particulate Matter (PM / PM₁₀/PM_{2.5}) from Unit X011 shall not exceed (24.5 / 14.5/9.5) tons during any consecutive 12 month period.</p> | <p>ADEM Admin. Code R. 335-3-14.04(8)</p> |
| <p>3. Unit X011 shall vent to the RTO when operating. If Unit X011's exhausts bypass the RTO the VOC must be calculated and reported as if there was no (0%) capture and destruction of VOC in the RTO.</p> | <p>ADEM Admin. Code R. 335-3-14-.04(8)</p> |
| <p>4. This Unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.</p> | <p>ADEM Admin. Code R. 335-3-4-.01</p> |
| <p>5. This Unit shall not discharge into the atmosphere particulate matter in any one hour in excess of ...:</p> | <p>ADEM Admin. Code R. 335-3-4-.04</p> |

$E = 3.59 (P^{0.62})$ where P is the process weight in tons/hr

Regulations

6. This Unit is subject to the applicable emissions standards of 40 CFR Part 63 Subpart JJ §63.802 “National Emission Standards for Wood Furniture Manufacturing Operations” to include §63.802 (b)(1) through (b)(3).

ADEM Admin. Code R. 335-3-11-.06(35)

This Unit shall not emit greater than 1.0 pound of VHAPs per pound of VHAPs per pound of solids as delivered to the applicator for all coatings as determined by a monthly average among other requirements.

This Unit shall not emit greater than 0.2 pound of VHAPs per pound of solids as delivered to the applicator for all adhesives among other requirements.

3. Compliance and Performance Test Methods and Procedures

1. The VHAPs content by weight of each VHAPs containing material used shall be determined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A. Vendor data based on this method is an appropriate substitute.
2. The VOC content by weight of each VOC containing material used shall be determined using EPA Test Method 24, as defined in 40 CFR 60, Appendix A. Vendor data based on this method is an appropriate substitute.
3. The temperature of the RTO shall be maintained at a minimum of the combustion chamber temperature used to demonstrate that 95.0% DRE is being achieved during the most recent RTO efficiency performance (3-run arithmetic average) test. If future testing is required by ADEM, a new temperature parameter shall be established.
4. The minimum temperatures of the RTO, as required above shall be maintained at all times, except during emissions testing as approved by the Department. The combustion chamber temperature of the RTO must be continuously recorded on a chart or other permanent record. The RTO must have audible alarm or other easily detectable signal, which will provide a warning when the instantaneous combustion chamber temperature decreases to less than the established minimum operational (3-hour rolling average) temperature. If the 3-hour rolling average falls below the minimum operational temperature for more than 15 minutes, the process(es) will automatically shut down.

ADEM Admin. Code R. 335-3-11-.06(35)

ADEM Admin. Code R. 335-3-1-04

ADEM Admin. Code R. 335-3-11-.06(35)

ADEM Admin. Code R. 335-3-11-.06(35)

Regulations

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| <p>5. The origin and detectability of the audible or other signal shall be such that it can be readily heard or detected by the operator or another person who will immediately determine the cause and take appropriate action to correct any problem and/or record the malfunction/reason. The time, duration, cause(s), and the action(s) taken for any operating temperature less than the established minimum shall be recorded in a form suitable for inspection. These records shall be maintained for at least five years. For periods when the temperature is less than the minimum operating (3-hour rolling average) temperature, VOC must be calculated, and reported as if there was no (0%) capture and destruction of VOC in the RTO.</p> | ADEM Admin. Code R. 335-3-11-.06(35) |
| <p>4. Emission Monitoring</p> | |
| <p>1. The VOC and PM/PM₁₀ monitoring requirements in this permit shall be as required in Section 5—Recordkeeping and Reporting Requirements.</p> | ADEM Admin. Code R. 335-3-1-.04 |
| <p>5. Recordkeeping and Reporting Requirements</p> | |
| <p>1. Accurate and understandable records of consumption, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit.</p> | ADEM Admin. Code R. 334-3-1-.04 |
| <p>(a) The type, quantity in gallons, and weight in pounds of each VOC or HAP containing material used during each calendar month.</p> | |
| <p>(b) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.</p> | |
| <p>(c) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.</p> | |
| <p>(d) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories. Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.</p> | |
| <p>(e) Complete inventories of the VOC and HAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month and no later than 15 days afterward.</p> | |
| <p>(f) The amount of VOCs emitted per calendar month from the coating</p> | |

Regulations

and cleaning operations in units of pounds and tons.

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| <p>(g) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.</p> | <p>ADEM Admin. Code R. 335-3-1-.04</p> |
| <p>2. Records of Unit X011 inspections and appropriate maintenance actions shall be retained for at least five years and available for inspection upon request. This recordkeeping should also include the nature and date of any maintenance actions taken to correct the problem(s).</p> | <p>ADEM Admin. Code R. 335-3-1-.04</p> |
| <p>3. A written report for the RTO shall be submitted to the Air Division along with the emission reports. The report shall provide the following information, as applicable.</p> <p>(a) The quantity of solvents of VOC and HAP in the coating applied.</p> <p>(b) The amount of VOC and HAP vented to the RTO by Unit X011</p> <p>(c) The estimated average DRE of the RTO.</p> <p>(d) The amount of VOC and HAP released or exhausted into the atmosphere by Unit X011.</p> <p>(e) The overall reduction of the VOC and HAP emissions from Unit X011.</p> <p>(f) The time and date of any and all periods of coating operations where the temperature of the RTO is below the established minimum temperature.</p> <p>(g) The cumulative or total quantity of VOC and HAP released or exhausted into the atmosphere during the applicable month and previous eleven months.</p> | <p>ADEM Admin. Code R. 335-3-1-.04</p> |
| <p>4. When the bypassing occurs on the RTO, the time, date, duration and estimated VOC and HAP emissions must be recorded.</p> | <p>ADEM Admin. Code R. 335-3-1-.04</p> |
| <p>5. Applicable recordkeeping requirements of 40 CFR Part 63 Subpart JJ §63.806, "National Emission Standards of Wood Furniture Manufacturing Operations" to include §63.806(a) through (e), and (h) through (j).</p> | <p>ADEM Admin. Code R. 335-1-16.04(2)</p> |
| <p>6. Applicable reporting requirements of 40 CFR Part 63 Subpart JJ §63.807, "National Emission Standards for Wood Furniture Manufacturing Operations" to include §63.807(a) through (c), and (e).</p> | <p>ADEM Admin. Code R. 335-3-1-.04</p> |
| <p>7. A report summarizing the information in provisos 5.1, 5.2, 5.3, 5.4 and 5.6 shall be submitted each calendar quarter by the 15th day of the month following the end of the quarter, in a format approved by the Department in advance.</p> | <p>ADEM Admin. Code R. 335-3-16-.04(2)</p> |

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8. This facility has 12 months after commencing operation of this Air Permit to modify the existing Major Source Operating Permit.

Emission Unit No. 021 (WOOD WASTE BOILER NO. 1)

Operating Permit Summary No. 21

Emission Unit(s):

29.5 MMBtu/hr Wood Waste Fired Boiler #1
(Gasifier), Unit 021

Designation No(s). in

No. 1 Power Boiler

Application:

Description:

29.5 MMBtu/hr Wood Waste Gasification
Boiler with Multiclone and ESP Control
Device

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: WOOD WASTE

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	23.6 LBS/HR OR 0.400 LBS/MMBTU 460 PPM @ 3% O2	BACT-PSD 40 CFR, Part 63, Subpart 5-D
NO _x	14.75 LBS/HR OR 0.50 LBS/MMBTU	BACT-PSD
Particulate	5.69 LBS/HR OR 0.0390 GRAINS/DSCF	BACT-PSD
PM ₁₀	3.41 LBS/HR OR 0.0270 GRAINS/DSCF	BACT-PSD
Filterable PM	0.043 lbs/MMBTU of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS D _c
Opacity	20% as determined by a 6 minute average 10% without Wet Scrubber	SIP 40 CFR, Part 63, Subpart 5-D
SO ₂	9.0 LBS/HR	BACT-PSD
VOCs	9.0 LBS/HR	BACT-PSD
HYDROGEN CHLORIDE (HCL)	0.022 LBS/MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D
MERCURY (HG)	5.7E-06 MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to a particulate (PM) PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
3. This unit is subject to a PM ₁₀ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a VOCs PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
5. This unit is subject to a SO ₂ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
6. This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
7. This unit is subject to a CO PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
8. This unit is subject to the Standards of Performance for New Stationary Sources (NSPS); Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart D _c .	ADEM Admin. Code R. 335-3-10-.02
9. This unit is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD, or 5-D). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-11-.06
<i>Section 2—Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent measured in accordance with the 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-4-.01

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| 2. | This wood gasification boiler shall be restricted to burning wood-waste and biomass for fuel, with no permitted backup fuel. | ADEM Admin. Code R.
335-3-14-.03 |
| 3. | The particulate emission rate shall not exceed 0.17 gr/SDCF adjusted to 50% excess air measured in accordance with the 40 CFR Part 60, Appendix A, Method 5 or Method 17. The Department may require stack testing at any time. | ADEM Admin. Code R.
335-3-4-.08 |
| 4. | This boiler is subject to the Standards of Performance of New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years and available upon request. | ADEM Admin. Code R.
335-3-10-.02 |
| 5. | Emissions of CO from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 23.6 lbs./hr or 0.400 lbs./MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 10. | ADEM Admin. Code R.
335-3-14-.03 |
| 6. | CO emission concentrations shall not exceed 460 ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 7. | Emissions of particulate matter from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 5.69 lbs./hr or 0.0390 grains/dry standard cubic foot in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17. | ADEM Admin. Code R.
335-3-14-.03 |
| 8. | Emissions of Filterable PM shall not exceed 0.043 lbs/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 9. | Emissions of particulate matter equal to or less than 10 microns from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 3.41 lbs./hr or 0.0270 grains/dry standard cubic foot in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A. | ADEM Admin. Code R.
335-3-14-.03 |

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| <p>10. This wood gasification boiler shall install and operate “Boiler Design and Combustion Controls” (BD & CC). This shall consist of A. Oxygen Trim, B. Staged Combustion, C. Steam Injection, and D. Overfire Air.</p> | <p>ADEM Admin. Code R.
335-3-14-.03</p> |
| <p>11. Design Parameters that shall be met under “Boiler Design and Combustion Controls” (BD & CC) to minimize the production of NOx shall be as follows:</p> <p style="margin-left: 40px;">Operating Range for Oxygen Content of Flue Gas:
TBD % (+/- 2.00 %)</p> <p style="margin-left: 40px;">The averaging times for the above parameter shall consist of a reading taken at least every minute. Sixty minute readings will make up a block clock hour average. Twelve block clock hour averages will be averaged to make up a 12 hour rolling average. The 12 hour rolling average will determine compliance with the above limit.</p> | <p>ADEM Admin. Code R.
335-3-14-.03</p> |
| <p>12. Emissions of SO₂ from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 9.0 lbs/hr in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.</p> | <p>ADEM Admin. Code R.
335-3-14-.03</p> |
| <p>13. Emissions of VOCs from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 9.0 lbs/hr in accordance with 40 CFR Part 60, Appendix A, Method 25A.</p> | <p>ADEM Admin. Code R.
335-3-14-.03</p> |

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| 14. | Emissions of NO _x from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 14.750 lbs./hr or 0.500 lbs./MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. | ADEM Admin. Code R.
335-3-14-.03 |
| 15. | Emissions of Mercury (Hg) shall not exceed 5.7E ⁻⁰⁶ lbs / MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 16. | Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lbs /MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 17. | Opacity shall not exceed 10% (40 CFR, Part 63, Subpart 5-D, Table 4). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 18. | The ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste shall be kept in good repair. | ADEM Admin. Code R.
335-3-14-.03 |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R.
335-3-1-.05 |
| 2. | Method 5 or 17 as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 3. | Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 4. | Method 6 or 6C as defined in 40 CFR 60, Appendix A shall be used in the determination of sulfur dioxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 5. | Method 10 as defined in 40 CFR 60, Appendix A shall be used in the determination of carbon monoxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |

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| 6. | Method 7 or 7E as defined in 40 CFR 60, Appendix A shall be used in the determination of nitrogen oxides emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 7. | Method 25A as defined in 40 CFR 60, Appendix A shall be used in the determination of volatile organic compounds emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |

Section 4--Emission Monitoring

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|----------------------------|--|-------------------------------------|-----|------------------|-----|------------------|-----|----------------|-----|-----------------|-----|--|--|----------------------------|-----|-------------------|-----|--|--|------------------------------------|
| 1. | <p>Emissions tests are to be conducted for the following pollutants at intervals not to exceed annual testing following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing.</p> <table border="0" style="margin-left: 20px;"> <tr> <td>Particulates</td> <td>(X)</td> <td>Carbon Monoxide</td> <td>(X)</td> <td>PM₁₀</td> <td>(X)</td> </tr> <tr> <td>Sulfur Dioxide</td> <td>()</td> <td>Nitrogen Oxides</td> <td>(X)</td> <td></td> <td></td> </tr> <tr> <td>Volatile Organic Compounds</td> <td>()</td> <td>Visible Emissions</td> <td>(X)</td> <td></td> <td></td> </tr> </table> | Particulates | (X) | Carbon Monoxide | (X) | PM ₁₀ | (X) | Sulfur Dioxide | () | Nitrogen Oxides | (X) | | | Volatile Organic Compounds | () | Visible Emissions | (X) | | | ADEM Admin. Code R.
335-3-1-.04 |
| Particulates | (X) | Carbon Monoxide | (X) | PM ₁₀ | (X) | | | | | | | | | | | | | | | |
| Sulfur Dioxide | () | Nitrogen Oxides | (X) | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds | () | Visible Emissions | (X) | | | | | | | | | | | | | | | | | |
| 2. | Conduct annual emission testing for HCl and Hg or conduct monthly fuel sampling and analysis (upon preparation of site-specific fuel plan). If test results are below 75% of the limit on two consecutive tests, testing can be reduced to once per three years. (40 CFR 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | | | | | | | |
| 3. | Conduct annual emission testing for a given pollutant if two consecutive annual tests are less the 75% of the applicable limit, testing can be reduced to once per three years (40 CFR Part 63, Subpart 5-D, Tables 4, 7 and 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | | | | | | | |
| 4. | Install and operate Continuous Oxygen Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | | | | | | | |
| 5. | Install and operate Continuous Opacity Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | | | | | | | |
| 6. | Establish operating load limit during performance test (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | | | | | | | |
| 7. | Submission of other reports regarding monitoring | ADEM Admin. Code R.
335-3-1-.04 | | | | | | | | | | | | | | | | | | |

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 stack emission testing at any time.

8. Perform one -time energy assessment and conduct tune-up every five years. (40 CFR Part 63, Subpart 5-D, Table 3) The compliance date is January 31, 2016.
9. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the boiler(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the stack.
10. At least monthly visible observations will be performed on the ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste by a person familiar with the operation to determine if they are in good repair. If a problem is noted, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed to ensure the problem has been corrected. At least annually, preventative maintenance shall be performed on the cyclone(s) and ESP.
11. Accurate and understandable monitoring of the parameters in Proviso No. 2.11, which records at least the last five years of data, will be taken and permanently recorded.
12. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.

ADEM Admin. Code R.
335-3-11-.06

ADEM Admin. Code
R. 335-3-1-.04

ADEM Admin. Code
R. 335-3-1-.04

ADEM Admin. Code
R. 335-3-1-.04

ADEM Admin. Code
R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of these parameters in Proviso No. 2.11, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit. A report summarizing exceedances of the above information shall be submitted for each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance.

ADEM Admin. Code R.
335-3-1-.04

2. The testing required in proviso 4.1 shall be used to determine compliance and to develop the following emission factors which will be used in determining compliance with allowable rolling 12 month totals of PM and PM₁₀ emission rates. These emission factors will change with every valid test accepted by ADEM for compliance purposes. If an additional control device is added or removed, testing will be required to establish a new set of emission factors.

ADEM Admin. Code R.
335-3-1-.04

- A. lbs PM/MMBTU input and
- B. lbs PM₁₀/MMBTU input

3. The BTU input for each boiler will be determined by keeping steam flow records to measure the quantity of steam produced daily. The daily BTU input for each boiler shall be determined by the following formula:
BTU input = {(1201.95 BTU/lb at 275 psi) x (lbs of steam generated (from recorder))} / {0.68 (boiler efficiency)}

ADEM Admin. Code R.
335-3-1-.04

The lowest steam flow-rate in a particular hour shall be the steam flow rate used for that particular hour in the above calculation.

4. Consecutive rolling 12 month PM and PM₁₀ emissions for these boilers shall be determined by summing daily PM and PM₁₀ emissions, which shall be calculated using the following formulas:

A. $PM \text{ (lbs/day)} = (PM \text{ lbs/ MMBTU input factor established in Proviso No. 5.2)} \times (BTU \text{ input established in Proviso No. 5.3})$

B. $PM_{10} \text{ (lbs/day)} = (PM_{10} \text{ lbs/MMBTU input factor established in Proviso No. 5.2)} \times (BTU \text{ input established in Proviso No. 5.3})$

Thus, 24 hourly calculations will make up a daily calculation.

5. The following information shall be submitted to ADEM on a quarterly basis by the 10th day of the month following the end of the quarter:

A. Daily steam flow recordings from each boiler.

B. Daily PM and PM₁₀ emission calculations for each boiler.

C. Monthly total of PM and PM₁₀ emission calculations

D. Rolling consecutive 12 month totals of PM and PM₁₀ emissions.

6. Accurate and understandable records of these parameters in Proviso No. 5.2 through 5.5, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit.

7. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years from the date of generation and available upon request.

ADEM Admin. Code R.
335-3-1-.04

ADEM Admin. Code R.
335-3-1-.04

ADEM Admin. Code R.
335-3-1-.04

ADEM Admin. Code R.
335-3-10-.02

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| 8. | A log book of the daily visible observations and records of boiler(s) inspections and appropriate maintenance actions required in proviso 4.10 and 4.11 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 9. | Within 10 days of the end of each month, compliance with provisos 5.1 to 5.8 for this unit will be determined. These records shall be maintained for 5 years. Should this facility, at any time, exceed the limits of this permit based upon the most current testing approved by the Department or other recordkeeping, the Air Division must be notified in writing within ten (10) days of the identification of the exceedance. | ADEM Admin. Code R.
335-3-1-.04 |
| 10. | Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (§63.7505(b)(4) 40 CFR Part 63, Subpart 5-D). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |

Emission Unit No. 022 (WOOD WASTE BOILER NO. 2)

Operating Permit Summary No. 22

Emission Unit(s):

29.5 MMBtu/hr Wood Waste Fired Boiler #2
(Gasifier), Unit 022

Designation No(s). in

No. 2 Power Boiler

Application:

Description:

29.5 MMBtu/hr Wood Waste Gasification
Boiler with Multiclone and ESP Control
Device

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: WOOD WASTE

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	23.6 LBS/HR OR 0.400 LBS/MMBTU 460 PPM @ 3% O2	BACT-PSD 40 CFR, Part 63, Subpart 5-D
NO _x	14.75 LBS/HR OR 0.50 LBS/MMBTU	BACT-PSD
Particulate	5.69 LBS/HR OR 0.0390 GRAINS/DSCF 0.039 LBS/MMBTU, 3 RUN AVERAGE	BACT-PSD 40 CFR, Part 63, Subpart 5-D
PM ₁₀	3.41 LBS/HR OR 0.0270 GRAINS/DSCF	BACT-PSD
Filterable PM	0.043 lbs/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS Dc
Opacity	20% as determined by a 6 minute average 10% without Wet Scrubber	SIP 40 CFR, Part 63, Subpart 5-D
SO ₂	9.0 LBS/HR	BACT-PSD
VOCs	9.0 LBS/HR	BACT-PSD
HYDROGEN CHLORIDE (HCL)	0.022 LBS/MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D
MERCURY (HG)	5.7E-06 MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to a particulate PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
3. This unit is subject to a PM ₁₀ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a VOCs PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
5. This unit is subject to a SO ₂ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
6. This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
7. This unit is subject to a CO PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
8. This unit is subject the Standards of performance for New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart D _c .	ADEM Admin. Code R. 335-3-10-.02
9. This unit is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD, 5-D). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-11-.06
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent measured in accordance with the 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-4-.01

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| 2. | This wood gasification boiler shall be restricted to burning wood-waste and biomass for fuel, with no permitted backup fuel. | ADEM Admin. Code R.
335-3-14-.03 |
| 3. | The particulate emission rate shall not exceed 0.17 gr/SDCF adjusted to 50% excess air measured in accordance with the 40 CFR Part 60, Appendix A, Method 5 or Method 17. The Department may require stack testing at any time. | ADEM Admin. Code R.
335-3-4-.08 |
| 4. | This boiler is subject to the Standards of Performance of New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years and available upon request. | ADEM Admin. Code R.
335-3-10-.02 |
| 5. | Emissions of CO from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 23.6 lbs./hr or 0.400 lbs./MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 10. | ADEM Admin. Code R.
335-3-14-.03 |
| 6. | CO emission concentrations shall not exceed 460 ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 7. | Emissions of particulate matter from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 5.69 lbs./hr or 0.0390 grains/dry standard cubic foot in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17. | ADEM Admin. Code R.
335-3-14-.03 |
| 8. | Emissions of Filterable PM shall not exceed 0.043 lbs/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 9. | Emissions of particulate matter equal to or less than 10 microns from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 3.41 lbs./hr or 0.0270 grains/dry standard cubic foot in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A. | ADEM Admin. Code R.
335-3-14-.03 |

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| 10. This wood gasification boiler shall install and operate "Boiler Design and Combustion Controls" (BD & CC). This shall consist of A. Oxygen Trim, B. Staged Combustion, C. Steam Injection, and D. Overfire Air. | ADEM Admin. Code R.
335-3-14-.03 |
| 11. Design Parameters that shall be met under "Boiler Design and Combustion Controls" (BD & CC) to minimize the production of NOx shall be as follows:

Operating Range for Oxygen Content of Flue Gas:
TBD % (+/- 2.00 %)

The averaging times for the above parameter shall consist of a reading taken at least every minute. Sixty minute readings will make up a block clock hour average. Twelve block clock hour averages will be averaged to make up a 12 hour rolling average. The 12 hour rolling average will determine compliance with the above limit. | ADEM Admin. Code R.
335-3-14-.03 |
| 12. Emissions of SO ₂ from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 9.0 lbs./hr in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C. | ADEM Admin. Code R.
335-3-14-.03 |
| 13. Emissions of VOCs from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 9.0 lbs./hr in accordance with 40 CFR Part 60, Appendix A, Method 25A. | ADEM Admin. Code R.
335-3-14-.03 |

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| 14. | Emissions of NO _x from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 14.750 lbs./hr or 0.500 lbs./MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. | ADEM Admin. Code R.
335-3-14-.03 |
| 15. | Emissions of Mercury (Hg) shall not exceed 5.7E ⁻⁰⁶ MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 16. | Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lbs/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 17. | Opacity shall not exceed 10% (40 CFR, Part 63, Subpart 5-D, Table 4). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 18. | The ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste shall be kept in good repair. | ADEM Admin. Code R.
335-3-14-.03 |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R.
335-3-1-.05 |
| 2. | Method 5 or 17 as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 3. | Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 4. | Method 6 or 6C as defined in 40 CFR 60, Appendix A shall be used in the determination of sulfur dioxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 5. | Method 10 as defined in 40 CFR 60, Appendix A shall be used in the determination of carbon monoxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 6. | Method 7 or 7E as defined in 40 CFR 60, Appendix A | ADEM Admin. Code R. |

shall be used in the determination of nitrogen oxides emissions from the stack.

335-3-1-.05

7. Method 25A as defined in 40 CFR 60, Appendix A shall be used in the determination of volatile organic compounds emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

1. Emissions tests are to be conducted for the following pollutants at intervals not to exceed annual testing following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing.

ADEM Admin. Code R.
335-3-1-.04

Particulates	(X)	Carbon Monoxide (X)	PM ₁₀ (X)
Sulfur Dioxide	()	Nitrogen Oxides (X)	
Volatile Organic Compounds	()	Visible Emissions (X)	

2. Conduct annual emission testing for HCl and Hg or conduct monthly fuel sampling and analysis (upon preparation of site-specific fuel plan). If test results are below 75% of the limit on two consecutive tests, testing can be reduced to once per three years. (40 CFR {art 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

3. Conduct annual emission testing for a given pollutant if two consecutive annual tests are less the 75% of the applicable limit, testing can be reduced to once per three years (40 CFR Part 63, Subpart 5-D, Tables 4, 7 and 8). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

4. Install and operate Continuous Oxygen Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

5. Install and operate Continuous Opacity Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

6. Establish operating load limit during performance test (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

7. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment

ADEM Admin. Code R.
335-3-1-.04

malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

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| 8. | Perform one – time energy assessment and conduct tune – up every five years. (40 CFR 63, Subpart 5-D, Table 3) The compliance date is January 31, 2016. | ADEM Admin. Code R. 335-3-11-.06 |
| 9. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the boiler(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the stack. | ADEM Admin. Code R. 335-3-1-.04 |
| 10. | At least monthly visible observations will be performed on the ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste by a person familiar with the operation to determine if they are in good repair. If a problem is noted, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed to ensure the problem has been corrected. At least annually, preventative maintenance shall be performed on the cyclone(s) and ESP. | ADEM Admin. Code R. 335-3-1-.04 |
| 11. | Accurate and understandable monitoring of the parameters in Proviso No. 2.11, which records at least the last five years of data, will be taken and permanently recorded. | ADEM Admin. Code R. 335-3-1-.04 |
| 12. | The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R. 335-3-1-.04 |

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of these parameters in Proviso No. 2.11, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit. A report summarizing exceedances of the above information shall be submitted for each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance.

ADEM Admin. Code R.
335-3-1-.04

2. The testing required in proviso 4.1 shall be used to determine compliance and to develop the following emission factors which will be used in determining compliance with allowable rolling 12 month totals of PM and PM₁₀ emission rates. These emission factors will change with every valid test accepted by ADEM for compliance purposes. If an additional control device is added or removed, testing will be required to establish a new set of emission factors.

ADEM Admin. Code R.
335-3-1-.04

- A. lbs PM/MMBTU input and
- B. lbs PM₁₀/MMBTU input.

3. The BTU input for each boiler will be determined by keeping steam flow records to measure the quantity of steam produced daily. The daily BTU input for each boiler shall be determined by the following formula:
BTU input = {(1201.95 BTU/lb at 275 psi) x (lbs of steam generated (from recorder))} / {0.68 (boiler efficiency)}

ADEM Admin. Code R.
335-3-1-.04

The lowest steam flow-rate in a particular hour shall be the steam flow rate used for that particular hour in the above calculation.

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| <p>4. Consecutive rolling 12 month PM and PM₁₀ emissions for these boilers shall be determined by summing daily PM and PM₁₀ emissions, which shall be calculated using the following formulas:</p> <p style="padding-left: 40px;">A. PM (lbs/day) = (PM lbs/ MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3)</p> <p style="padding-left: 40px;">B. PM₁₀ (lbs/day) = (PM₁₀ lbs/MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3)</p> <p>Thus, 24 hourly calculations will make up a daily calculation.</p> | <p>ADEM Admin. Code R.
335-3-1-.04</p> |
| <p>5. The following information shall be submitted to ADEM on a quarterly basis by the 10th day of the month following the end of the quarter:</p> <p style="padding-left: 40px;">A. Daily steam flow recordings from each boiler.</p> <p style="padding-left: 40px;">B. Daily PM and PM₁₀ emission calculations for each boiler.</p> <p style="padding-left: 40px;">C. Monthly total of PM and PM₁₀ emission calculations</p> <p style="padding-left: 40px;">D. Rolling consecutive 12 month totals of PM and PM₁₀ emissions.</p> | <p>ADEM Admin. Code R.
335-3-1-.04</p> |
| <p>6. Accurate and understandable records of these parameters in Proviso No. 5.2 through 5.5, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit.</p> | <p>ADEM Admin. Code R.
335-3-1-.04</p> |
| <p>7. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years from the date of generation and available upon request.</p> | <p>ADEM Admin. Code R.
335-3-10-.02</p> |

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| 8. A log book of the daily visible observations and records of boiler(s) inspections and appropriate maintenance actions required in proviso 4.9 and 4.10 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 9. Within 10 days of the end of each month, compliance with provisos 5.1 to 5.8 for this unit will be determined. These records shall be maintained for 5 years. Should this facility, at any time, exceed the limits of this permit based upon the most current testing approved by the Department or other recordkeeping, the Air Division must be notified in writing within ten (10) days of the identification of the exceedance. | ADEM Admin. Code R.
335-3-1-.04 |
| 10. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (§63.7505(b)(3) 40 CFR Part 63, Subpart 5-D). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |

Emission Unit No. 023 (WOOD WASTE BOILER NO. 3)

Operating Permit Summary No. 23

Emission Unit(s):

29.5 MMBtu/hr Wood Waste Fired Boiler #3
(Gasifier), Unit 023

Designation No(s). in Application:

No. 3 Power Boiler

Description:

29.5 MMBtu/hr Wood Waste Gasification
Boiler with Multiclone and ESP Control
Device

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: WOOD WASTE

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	20.53 LBS/HR 460 PPM @ 3% O ₂	SYNTHETIC MINOR PSD 40 CFR, Part 63, Subpart 5-D
NO _x	14.75 LBS/HR OR 0.50 LBS/MMBTU	BACT-PSD
Particulate	24.9 TONS/YR	SYNTHETIC MINOR PSD
PM ₁₀	14.9 TONS/YR	SYNTHETIC MINOR PSD
Filterable PM	0.043 lbs/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS D _c
Opacity	20% as determined by a 6 minute average 10% without Wet Scrubber	SIP 40 CFR, Part 63, Subpart 5-D
SO ₂	Less than 5 µg/m ³ /hr	SYNTHETIC MINOR PSD
HYDROGEN CHLORIDE (HCL)	0.022 LBS/MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D
MERCURY (HG)	5.7E-06 MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
3. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a SO ₂ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
5. This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-14-.03
6. This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
7. This unit is subject to the Standards of Performance for New Stationary Sources (NSPS); Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart D _c .	ADEM Admin. Code R. 335-3-10-.02
8. This unit is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD, 5-D). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-11-.06
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent measured in accordance with the 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-4-.01

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| 2. | This wood gasification boiler shall be restricted to burning wood-waste and biomass for fuel, with no permitted backup fuel. | ADEM Admin. Code R.
335-3-14-.03 |
| 3. | The particulate emission rate shall not exceed 0.17 gr/SDCF adjusted to 50% excess air measured in accordance with the 40 CFR Part 60, Appendix A, Method 5 or Method 17. The Department may require stack testing at any time. | ADEM Admin. Code R.
335-3-4-.08 |
| 4. | This boiler is subject to the Standards of Performance of New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years and available upon request. | ADEM Admin. Code R.
335-3-14-.03 |
| 5. | CO emission concentrations shall not exceed 460 ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 6. | Emissions of CO from this wood gasification boiler shall not exceed 20.53 lbs./hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10. | ADEM Admin. Code R.
335-3-14-.03 |
| 7. | Emissions of particulate matter from this wood gasification boiler shall not exceed 24.9 tons/yr. as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17. | ADEM Admin. Code R.
335-3-14-.03 |
| 8. | Emissions of particulate matter equal to or less than 10 microns from this wood gasification boiler shall not exceed 14.9 tons/yr. as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A. | ADEM Admin. Code R.
335-3-14-.03 |
| 9. | Emissions of PM shall not exceed 0.039 lbs/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 10. | This wood gasification boiler shall install and operate "Boiler Design and Combustion Controls" (BD & CC). This shall consist of A. Oxygen Trim, B. Staged Combustion, C. Steam Injection, and D. Overfire Air. | ADEM Admin. Code R.
335-3-14-.03 |

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| 11. | Design Parameters that shall be met under “Boiler Design and Combustion Controls” (BD & CC) to minimize the production of NOx shall be as follows: | ADEM Admin. Code R.
335-3-14-.03 |
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Operating Range for Oxygen Content of Flue Gas:
10.16 % (+/- 2.00 %)

The averaging times for the above parameter shall consist of a reading taken at least every minute. Sixty minute readings will make up a block clock hour average. Twelve block clock hour averages will be averaged to make up a 12 hour rolling average. The 12 hour rolling average will determine compliance with the above limit.

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| 12. | Emissions of NOx from this wood gasification boiler shall not exceed 14.750 lbs./hr or 0.500 lbs./MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. | ADEM Admin. Code R.
335-3-14-.03 |
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| 13. | Emissions of Mercury (Hg) shall not exceed 5.7E ⁻⁰⁶ MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
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| 14. | Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lbs/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
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| 15. | Opacity shall not exceed 10% (40 CFR, Part 63, Subpart 5-D, Table 4). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
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| 16. | The ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste shall be kept in good repair. | ADEM Admin. Code R.
335-3-14-.03 |
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Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R.
335-3-1-.05 |
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| 2. | Method 5 or 17 as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
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| 3. | Method 201 or 201A as defined in 40 CFR Part 50, Appendix M, Method 201 or 201A shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 4. | Method 6 or 6C as defined in 40 CFR 60, Appendix A shall be used in the determination of sulfur dioxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 5. | Method 10 as defined in 40 CFR 60, Appendix A shall be used in the determination of carbon monoxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 6. | Method 7 or 7E as defined in 40 CFR 60, Appendix A shall be used in the determination of nitrogen oxides emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |

Section 4--Emission Monitoring

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|----------------------------|---|-------------------------------------|----------------------|---------------------|----------------------|----------------|-----|---------------------|--|----------------------------|-----|-----------------------|--|------------------------------------|
| 1. | <p>Emissions tests are to be conducted for the following pollutants at intervals not to exceed annual testing following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing.</p> <table border="0"> <tr> <td>Particulates</td> <td>(X)</td> <td>Carbon Monoxide (X)</td> <td>PM₁₀ (X)</td> </tr> <tr> <td>Sulfur Dioxide</td> <td>()</td> <td>Nitrogen Oxides (X)</td> <td></td> </tr> <tr> <td>Volatile Organic Compounds</td> <td>()</td> <td>Visible Emissions (X)</td> <td></td> </tr> </table> | Particulates | (X) | Carbon Monoxide (X) | PM ₁₀ (X) | Sulfur Dioxide | () | Nitrogen Oxides (X) | | Volatile Organic Compounds | () | Visible Emissions (X) | | ADEM Admin. Code R.
335-3-1-.04 |
| Particulates | (X) | Carbon Monoxide (X) | PM ₁₀ (X) | | | | | | | | | | | |
| Sulfur Dioxide | () | Nitrogen Oxides (X) | | | | | | | | | | | | |
| Volatile Organic Compounds | () | Visible Emissions (X) | | | | | | | | | | | | |
| 2. | Conduct annual emission testing for HCl and Hg or conduct monthly fuel sampling and analysis (upon preparation of site-specific fuel plan). If test results are below 75% of the limit on two consecutive tests, testing can be reduced to once per three years. (40 CFR Part 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | |
| 3. | Conduct annual emission testing for a given pollutant if two consecutive annual tests are less the 75% of the applicable limit, testing can be reduced to once per three years (40 CFR Part 63, Subpart 5-D, Tables 2, and 5). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | |
| 4. | Install and operate Continuous Oxygen Monitoring System (40 CFR Part 63, Subpart 5-D, Table 4, 7, and 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 | | | | | | | | | | | | |
| 5. | Install and operate Continuous Operating Monitoring | | | | | | | | | | | | | |

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| System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R. 335-3-11-.06 |
| 6. Establish operating load limit during performance test (40 CFR Part 63, Subpart 5-D, Table 8) The compliance date is January 31, 2016. | ADEM Admin. Code R. 335-3-11-.06 |
| 7. Perform one-time energy assessment and conduct tune-up every five years (40 CFR Part 63, Subpart 5-D, Table 3) The compliance date is January 31, 2016. | ADEM Admin. Code R. 335-3-11-.06 |
| 8. 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 stack emission testing at any time. | ADEM Admin. Code R. 335-3-1-.04 |
| 9. Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the boiler(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the stack. | ADEM Admin. Code R. 335-3-1-.04 |
| 10. At least monthly visible observations will be performed on the ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste by a person familiar with the operation to determine if they are in good repair. If a problem is noted, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed to ensure the problem has been corrected. At least annually, preventative maintenance shall be performed on the cyclone(s) and ESP. | ADEM Admin. Code R. 335-3-1-.04 |
| 11. Accurate and understandable monitoring of the parameters in Proviso No. 2.11, which records at least the last five years of data, will be taken and permanently recorded. | ADEM Admin. Code R. 335-3-1-.04 |
| 12. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R. 335-3-1-.04 |

Section 5--Recordkeeping and Reporting Requirements

1. Accurate and understandable records of these parameters in Proviso No. 2.11, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit. A report summarizing exceedances of the above information shall be submitted for each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance.

ADEM Admin. Code R.
335-3-1-.04

2. The testing required in proviso 4.1 shall be used to determine compliance and to develop the following emission factors which will be used in determining compliance with allowable rolling 12 month totals of PM and PM₁₀ emission rates. These emission factors will change with every valid test accepted by ADEM for compliance purposes. If an additional control device is added or removed, testing will be required to establish a new set of emission factors.

ADEM Admin. Code R.
335-3-1-.04

- A. lbs PM/MMBTU input and
- B. lbs PM₁₀/MMBTU input.

3. The BTU input for each boiler will be determined by keeping steam flow records to measure the quantity of steam produced daily. The daily BTU input for each boiler shall be determined by the following formula:
BTU input = {(1201.95 BTU/lb at 275 psi) x (lbs of steam generated (from recorder))} / {0.68 (boiler efficiency)}

ADEM Admin. Code R.
335-3-1-.04

The lowest steam flow-rate in a particular hour shall be the steam flow rate used for that particular hour in the above calculation.

4. Consecutive rolling 12 month PM and PM₁₀ emissions for these boilers shall be determined by summing daily PM and PM₁₀ emissions, which shall be calculated using the following formulas:
- A. $PM \text{ (lbs/day)} = (PM \text{ lbs/ MMBTU input factor established in Proviso No. 5.2}) \times (BTU \text{ input established in Proviso No. 5.3})$
 - B. $PM_{10} \text{ (lbs/day)} = (PM_{10} \text{ lbs/MMBTU input factor established in Proviso No. 5.2}) \times (BTU \text{ input established in Proviso No. 5.3})$
- Thus, 24 hourly calculations will make up a daily calculation.
5. The following information shall be submitted to ADEM on a quarterly basis by the 10th day of the month following the end of the quarter:
- A. Daily steam flow recordings from each boiler.
 - B. Daily PM and PM₁₀ emission calculations for each boiler.
 - C. Monthly total of PM and PM₁₀ emission calculations
 - D. Rolling consecutive 12 month totals of PM and PM₁₀ emissions.
6. Accurate and understandable records of these parameters in Proviso No. 5.2 through 5.5, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit.
7. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years from the date of generation and available upon request.
- ADEM Admin. Code R.
335-3-1-.04
- ADEM Admin. Code R.
335-3-1-.04
- ADEM Admin. Code R.
335-3-1-.04
- ADEM Admin. Code R.
335-3-10-.02

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| 8. | A log book of the daily visible observations and records of boiler(s) inspections and appropriate maintenance actions required in proviso 4.9 and 4.10 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
| 9. | Within 10 days of the end of each month, compliance with provisos 5.1 to 5.8 for this unit will be determined. These records shall be maintained for 5 years. Should this facility, at any time, exceed the limits of this permit based upon the most current testing approved by the Department or other recordkeeping, the Air Division must be notified in writing within ten (10) days of the identification of the exceedance. | ADEM Admin. Code R.
335-3-1-.04 |
| 10. | Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (§63.7505(b)(4) 40 CFR Part 63, Subpart 5-D). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |

Emission Unit No. 024 (WOOD WASTE BOILER NO. 4)

Operating Permit Summary No. 24

Emission Unit(s):

15.0 MMBtu/hr Wood Waste Fired Boiler #4
(Gasifier), Unit 024

Designation No(s). in

No. 4 Power Boiler

Application:

Description:

15.0 MMBtu/hr Wood Waste Gasification
Boiler with Multiclone and ESP Control
Device

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: WOOD WASTE

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	22.60 LBS/HR 460 PPM @ 3% O ₂	SYNTHETIC MINOR PSD 40 CFR, Part 63, Subpart 5-D
NO _x	8.90 LBS/HR	SYNTHETIC MINOR PSD
Particulate	2.96 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	1.58 LBS/HR	SYNTHETIC MINOR PSD
Filterable PM	0.043 lbs/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
SO ₂	Less than 5 µg/m ³ /hr or 8.9 lbs/hr	SYNTHETIC MINOR PSD
Opacity	20% as determined by a 6 minute average 10% without Wet Scrubber	SIP 40 CFR, Part 63, Subpart 5-D
HYDROGEN CHLORIDE (HCL)	0.022 LBS/MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D
MERCURY (HG)	5.7E-06 MMBTU OF HEAT INPUT	40 CFR, Part 63, Subpart 5-D

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
3. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a NO _x PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
5. This unit is subject to a SO ₂ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
6. This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
7. This unit is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD, 5-D). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-11-.06
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent measured in accordance with the 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-4-.01
2. This wood gasification boiler shall be restricted to burning wood-waste and biomass for fuel, with no permitted backup fuel.	ADEM Admin. Code R. 335-3-14-.03

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| 3. | The particulate emission rate shall not exceed 0.17 gr/SDCF adjusted to 50% excess air measured in accordance with the 40 CFR Part 60, Appendix A, Method 5 or Method 17. The Department may require stack testing at any time. | ADEM Admin. Code R.
335-3-14-.08 |
| 4. | Emissions of CO from this wood gasification boiler shall not exceed 22.60 lbs./hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10. | ADEM Admin. Code R.
335-3-14-.03 |
| 5. | CO emission concentrations shall not exceed 460 ppm @3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 6. | Emissions of particulate matter from this wood gasification boiler shall not exceed 2.96 lbs./hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17. | ADEM Admin. Code R.
335-3-14-.03 |
| 7. | Emissions of particulate matter equal to or less than 10 microns from this wood gasification boiler shall not exceed 1.58 lbs./hr. as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A. | ADEM Admin. Code R.
335-3-14-.03 |
| 8. | Emissions of Filterable PM shall not exceed 0.043 lbs/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 9. | Emissions of NO _x from this wood gasification boiler shall not exceed 8.90 lbs./hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. | ADEM Admin. Code R.
335-3-14-.03 |
| 10. | Emissions of Hg shall not exceed 5.7E ⁻⁰⁶ lbs/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 11. | Emissions of HCl shall not exceed 0.022 lbs/MMBtu (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 12. | Opacity shall not exceed 10% (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |

- 13. The ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste shall be kept in good repair.

ADEM Admin. Code R.
335-3-14-.03

Section 3--Compliance and Performance Test Methods and Procedures

- 1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions.
- 2. Method 5 or 17 as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
- 3. Method 201 or 201A as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.
- 4. Method 6 or 6C as defined in 40 CFR 60, Appendix A shall be used in the determination of sulfur dioxide emissions from the stack.
- 5. Method 10 as defined in 40 CFR 60, Appendix A shall be used in the determination of carbon monoxide emissions from the stack.
- 6. Method 7 or 7E as defined in 40 CFR 60, Appendix A shall be used in the determination of nitrogen oxides emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

- 1. Emissions tests are to be conducted for the following pollutants at intervals not to exceed annual testing following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing.

Particulates	(X)	Carbon Monoxide	(X)	PM ₁₀	(X)
Sulfur Dioxide	()	Nitrogen Oxides	(X)		
Volatile Organic Compounds	()	Visible Emissions	(X)		
- 2. Conduct annual emission testing for HCl and Hg or conduct monthly fuel sampling and analysis (upon preparation of site-specific fuel plan). If test results are below 75% of the limit on two consecutive tests, testing can be reduced to once per three years. (40 CFR {art

ADEM Admin. Code R.
335-3-1-.04

ADEM Admin. Code R.
335-3-11-.06

63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016.

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| 3. | Conduct annual emission testing for a given pollutant if two consecutive annual tests are less the 75% of the applicable limit, testing can be reduced to once per three years (40 CFR Part 63, Subpart 5-D, Tables 2, and 5). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 4. | Install and operate Continuous Oxygen Monitoring System (40 CFR Part 63, Subpart 5-D, Table 4, 7, and 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 5. | Install and operate Continuous Opacity Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 6. | Establish operating load limit during performance test (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 7. | 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 stack emission testing at any time. | ADEM Admin. Code R.
335-3-1-.04 |
| 8. | Perform one-time energy assessment and conduct tune-up every five years (40 CFR Part 63, Subpart 5-D, Table 3). The compliance date is January 31, 2016. | ADEM Admin. Code R.
335-3-11-.06 |
| 9. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the boiler(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the stack. | ADEM Admin. Code
R. 335-3-1-.04 |
| 10. | At least monthly visible observations will be performed on the ESP, cyclone(s), hopper(s), and piping for the transport of wood-waste by a person familiar with the operation to determine if they are in good repair. If a problem is noted, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation | ADEM Admin. Code
R. 335-3-1-.04 |

will be performed to ensure the problem has been corrected. At least annually, preventative maintenance shall be performed on the cyclone(s) and ESP.

11. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.

ADEM Admin. Code R. 335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. The testing required in proviso 4.1 shall be used to determine compliance and to develop the following emission factors which will be used in determining compliance with allowable rolling 12 month totals of PM and PM₁₀ emission rates. These emission factors will change with every valid test accepted by ADEM for compliance purposes. If an additional control device is added or removed, testing will be required to establish a new set of emission factors.

ADEM Admin. Code R. 335-3-1-.04

- A. lbs PM/MMBTU input and
- B. lbs PM₁₀/MMBTU input.

2. The BTU input for each boiler will be determined by keeping steam flow records to measure the quantity of steam produced daily. The daily BTU input for each boiler shall be determined by the following formula:

ADEM Admin. Code R. 335-3-1-.04

BTU input = {(1201.95 BTU/lb at 275 psi) x (lbs of steam generated (from recorder))} / {0.68 (boiler efficiency)}

The lowest steam flow-rate in a particular hour shall be the steam flow rate used for that particular hour in the above calculation.

3. Consecutive rolling 12 month PM and PM₁₀ emissions for these boilers shall be determined by summing daily PM and PM₁₀ emissions, which shall be calculated using the following formulas:

ADEM Admin. Code R. 335-3-1-.04

A. PM (lbs/day) = (PM lbs/ MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3)

B. PM₁₀ (lbs/day) = (PM₁₀ lbs/MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3)

Thus, 24 hourly calculations will make up a daily calculation.

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| 4. | The following information shall be submitted to ADEM on a quarterly basis by the 10th day of the month following the end of the quarter:
A. Daily steam flow recordings from each boiler.
B. Daily PM and PM ₁₀ emission calculations for each boiler.
C. Monthly total of PM and PM ₁₀ emission calculations
D. Rolling consecutive 12 month totals of PM and PM ₁₀ emissions. | ADEM Admin. Code R.
335-3-1-.04 |
| 5. | Accurate and understandable records of these parameters in Proviso No. 5.2 through 5.5, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its permit. | ADEM Admin. Code R.
335-3-1-.04 |
| 6. | A log book of the daily visible observations and records of boiler(s) inspections and appropriate maintenance actions required in proviso 4.5 and 4.6 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |

7. Within 10 days of the end of each month, compliance with provisos 5.1 to 5.8 for this unit will be determined. These records shall be maintained for 5 years. Should this facility, at any time, exceed the limits of this permit based upon the most current testing approved by the Department or other recordkeeping, the Air Division must be notified in writing within ten (10) days of the identification of the exceedance.

ADEM Admin. Code R.
335-3-1-.04

8. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (§63.7505(b)(3) 40 CFR Part 63, Subpart 5-D). The compliance date is January 31, 2016.

ADEM Admin. Code R.
335-3-11-.06

Emission Unit No. 025 (NATURAL GAS BOILER NO. 5)

Operating Permit Summary No. 25

Emission Unit(s):

12.6 MMBtu/hr Natural Gas Fired Boiler #5,
Unit 025

Designation No(s). in

No. 5 Power Boiler

Application:

Description:

12.6 MMBtu/hr Natural Gas Fired Boiler
(300 HP)

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: NATURAL GAS

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	0.50 LBS/HR	SYNTHETIC MINOR PSD
NO _x	2.0 LBS/HR	SYNTHETIC MINOR PSD
Particulate	0.12 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	0.07 LBS/HR	SYNTHETIC MINOR PSD
	Recordkeeping	NSPS
Opacity	20% as determined by a 6 minute average	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
3. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a NO _x PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
5. This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-5-.01
6. This unit is subject the Standards of performance for New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart D _c .	ADEM Admin. Code R. 335-3-14-.03
7. 7. This unit is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD, 5-D). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-11-.06
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent measured in accordance with the 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-4-.01
2. This boiler shall be restricted to burning natural gas for fuel, with no permitted backup fuel.	ADEM Admin. Code R. 335-3-14-.03

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| 3. | The particulate emission rate shall not exceed 0.17 gr/SDCF adjusted to 50% excess air measured in accordance with the 40 CFR Part 60, Appendix A, Method 5 or Method 17. The Department may require stack testing at any time. | ADEM Admin. Code R.
335-3-4-.08 |
| 4. | Emissions of CO from this natural gas fired boiler shall not exceed 0.5 lbs/hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10. | ADEM Admin. Code R.
335-3-14-.03 |
| 5. | Emissions of particulate matter from this natural gas fired boiler shall not exceed 0.12 lbs/hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17. | ADEM Admin. Code R.
335-3-14-.03 |
| 6. | Emissions of particulate matter equal to or less than 10 microns from this natural gas fired boiler shall not exceed 0.07 lbs./hr. as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A. | ADEM Admin. Code R.
335-3-14-.03 |
| 7. | Emissions of NOx from this natural gas fired boiler shall not exceed 2.0 lbs./hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. | ADEM Admin. Code R.
335-3-14-.03 |
| 8. | This boiler is subject to the Standards of Performance of New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five (5) years and available upon request. | ADEM Admin. Code R.
335-3-10-.02 |

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. | Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R.
335-3-1-.05 |
| 2. | Method 5 or 17 as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 3. | Method 201 or 201A as defined in 40 CFR 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns | ADEM Admin. Code R.
335-3-1-.05 |

emissions from the stack.

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| 4. | Method 6 or 6C as defined in 40 CFR 60, Appendix A shall be used in the determination of sulfur dioxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 5. | Method 10 as defined in 40 CFR 60, Appendix A shall be used in the determination of carbon monoxide emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 6. | Method 7 or 7E as defined in 40 CFR 60, Appendix A shall be used in the determination of nitrogen oxides emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |

Section 4--Emission Monitoring

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| 1. | Within 10 days of the end of each month, compliance with all provisos will be determined. These records shall be maintained for 5 years. Should this facility, at any time, exceed the limits in this permit, the Air Division must be notified in writing within ten (10) days of the identification of the exceedance. | ADEM Admin. Code R.
335-3-1-.04 |
| 2. | 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 stack emission testing at any time. | ADEM Admin. Code R.
335-3-1-.04 |
| 3. | The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements. | ADEM Admin. Code R.
335-3-1-.04 |
| 4. | Daily visible observations will be performed on the stack(s) each day it (they) is/are in operation by a person familiar with the boiler(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the stack. | ADEM Admin. Code R.
335-3-1-.04 |

Section 5--Recordkeeping and Reporting Requirements

1. Records of daily fuel usage must be kept in a permanent form suitable for inspection. The records shall be retained for at least five years from the date of generation and available upon request.
2. A log book of the daily visible observations and records of boiler(s) inspections and appropriate maintenance actions required in proviso 4.4 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.

ADEM Admin. Code R.
335-3-10-.02

ADEM Admin. Code R.
335-3-1-.04

Emission Unit No. 031 (MISCELLANEOUS STORAGE TANKS)

Operating Permit Summary No. 31

Emission Unit(s): Storage Tanks, Unit 031
Designation No(s). in Application: Miscellaneous Storage Tanks, No. 31
Description: 31A: 20,000 GALLON STORAGE TANK (DF-1)
31B: 5,000 GALLON STORAGE TANK (DF-2)
31C: 8,000 GALLON STORAGE TANK (DF-3)
31D: 5,000 GALLON STORAGE TANK (G-1)
31E: 4,000 GALLON STORAGE TANK (T-1)
31F: 4,000 GALLON STORAGE TANK (S-1)
31G: 2,000 GALLON STORAGE TANK (T-2)
31H: 2,000 GALLON STORAGE TANK (TH-1)
31I: 900 GALLON STORAGE TANK (TH-2)
31J: 750 GALLON STORAGE TANK (TH-3)

Permitted Operating Schedule: 24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: None

Secondary: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	VAPOR CONTROL DEVICE INSTALLED AND OPERATED	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. These units are subject to the loading and storage of VOC limits.	ADEM Admin. Code R. 335-3-6-.03
<i>Section 2--Emission Standards</i>	
1. These units shall have installed and operate one of the control options listed in ADEM Admin. Code R. 335-3-6-.03 (2)	ADEM Admin. Code R. 335-3-6-.03 (2)
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. These units are subject to the general provisos only.	
<i>Section 4--Emission Monitoring</i>	
1. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.	
<i>Section 5--Recordkeeping and Reporting Requirements</i>	
1. Records will be kept of the control device(s) required in proviso 2.1. Records will be kept showing the contents of each storage tank. These will be available for inspection.	ADEM Admin. Code R. 335-3-1-.04

Emission Unit No. 032 (WOOD WASTE HANDLING SYSTEMS)

Operating Permit Summary No. 32

Emission Unit(s):

WOOD WASTE SYSTEM

Designation No(s). in Application:

Wellborn Wood Waste Systems No. 32

Description:

WOOD WASTE SYSTEM WITH ASSOCIATED BAGHOUSES

Cyclone Nos: 1, 2, 3, and 4

Baghouse Nos. 1, 2, 3, 4, 5, 6, 7, 8, and 9

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: NONE

Secondary: NONE

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6 minute average	SIP
Particulate	2.60 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	1.75 LBS/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lbs./hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-14-.03
3. Emissions of particulate matter equal to or less than 10 microns from all facility baghouses excluding Units 037 and 040 shall not exceed 1.75 lbs/hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-14-.03
4. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of...: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack	ADEM Admin. Code R. 335-3-1-.05

emissions.

2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
3. Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

1. Daily visible observations will be performed on the baghouse(s) each day it (they) is/are in operation by a person familiar with the baghouse(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the baghouse.

ADEM Admin. Code R.
335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. A log book of the daily visible observations and records of baghouse inspections and appropriate maintenance actions required in proviso 4.1 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.

ADEM Admin. Code R.
335-3-1-.04

Emission Unit No. 033 (LUMBER KILNS)

Operating Permit Summary No. 33

Emission Unit(s):

Lumber Kilns, Unit 033

Designation No(s). in Application:

Dry Kilns No. 33

Description:

Total 15 Dry Kilns Nos.:

DK-1, DK-2, DK-3, DK-4, DK-9, DK-10, DK-11, DKH-1, DKH-2, DKH-3, DKH-4, DKH-5, DKH-6, DKH-7, and DKH-8

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary:

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
VOCs	717 TONS OF VOCs PER ROLLING 12 MONTH PERIOD	PSD-BACT

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
2. This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-14-.04
<i>Section 2--Emission Standards</i>	
1. Emission of Volatile Organic Compounds (VOCs) from all operations facility-wide shall not exceed 717 tons per year (TPY) in any consecutive rolling 12-month period. These emissions are not only limited to coating, storage, cleanup, and etc.	ADEM Admin. Code R. 335-3-14-.04(8)
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 25A as defined in 40 CFR 60, Appendix A shall be used in the determination of volatile organic compounds emissions from the stack.	ADEM Admin. Code R. 335-3-1-.05
<i>Section 4--Emission Monitoring</i>	
1. The monitoring requirements in this permit shall be as required in Section 5--Recordkeeping and Reporting Requirements.	
<i>Section 5--Recordkeeping and Reporting Requirements</i>	
1. Accurate and understandable records of emissions of VOCs from this unit, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the following information:	ADEM Admin. Code R. 335-3-1-.04
(a) The calculations and any test data used to arrive at the calculation of emissions.	

- (b) Compliance with VOC limits shall be based upon monthly inventories.
 - (c) The amount of VOCs emitted per calendar month from this operation in units of pounds and tons
 - (d) The rolling 12-month total of VOCs emitted from this operation in units of pounds and tons.
2. A report summarizing the information in provisos 5.1 shall be submitted each calendar quarter by the 10th day of the month following the end of the quarter, in a format approved by the Department in advance.

ADEM Admin. Code
R. 335-3-1-.04

Emission Unit No. 034 (SAW MILL OPERATIONS)

Operating Permit Summary No. 034

Emission Unit(s):

Saw Mill Operations, Unit 034

Designation No(s). in Application:

Saw Mill No. 34

Description:

Saws, Screen, Hogger, Hopper, and Silo

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary:

Secondary:

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6 minute average	SIP
Particulate	2.60 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	1.75 LBS/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lbs/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-14-.03
3. Emissions of particulate matter equal to or less than 10 microns from all facility baghouses excluding Units 037 and 040 shall not exceed 1.75 lbs./hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-14-.03
4. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack	ADEM Admin. Code R. 335-3-1-.05

emissions.

2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
3. Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

1. Daily visible observations will be performed on the baghouse(s) each day it (they) is/are in operation by a person familiar with the baghouse(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the baghouse.

ADEM Admin. Code R.
335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. A log book of the daily visible observations and records of baghouse inspections and appropriate maintenance actions required in proviso 4.1 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.

ADEM Admin. Code R.
335-3-1-.04

Emission Unit No. 035 (CONCRETE BATCH PLANT)

Operating Permit Summary No. 35

Emission Unit(s):

Concrete Batch Plant Operations, Unit 035

Designation No(s). in Application:

Concrete Batch Plant No. 35

Description:

Baghouse Nos. CE-1 and CE-2

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary:

Secondary:

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6 minute average	SIP
Particulate	2.60 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	1.75 LBS/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-4-.04
4. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-4-.04
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lbs/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-14-.03
3. Emissions of particulate matter equal to or less than 10 microns from all facility baghouses excluding Units 037 and 040 shall not exceed 1.75 lbs/hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-14-.03
4. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack	ADEM Admin. Code R. 335-3-1-.05

emissions.

2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack.
3. Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

1. Daily visible observations will be performed on the baghouse(s) each day it (they) is/are in operation by a person familiar with the baghouse(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the baghouse.

ADEM Admin. Code R.
335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. A log book of the daily visible observations and records of baghouse inspections and appropriate maintenance actions required in proviso 4.1 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.

ADEM Admin. Code R.
335-3-1-.04

Emission Unit No. 037 (PANEL SAW WOOD WORKING OPERATIONS)

Operating Permit Summary No. 037

Emission Unit(s):

Panel Saw Wood Working Operations with Two Baghouses, Unit 037

Designation No(s). in Application:

Panel Saw Operations No. 37

Description:

Saws, Cyclone No. 5, Baghouses No. 11 and No. 12

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr.

Type and quantity of fuel used:

Primary:

Secondary:

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6 minute average	SIP
Particulate	3.12 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	3.12 LBS/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. Emissions of particulate matter from this Unit shall not exceed 3.12 lbs/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-14-.03
3. Emissions of particulate matter equal to or less than 10 microns from this Unit shall not exceed 3.12 lbs./hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	
4. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04

Section 3--Compliance and Performance Test Methods and Procedures

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| 1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions. | ADEM Admin. Code R.
335-3-1-.05 |
| 2. Method 5 or 5a as defined in 40 CFR 60, Appendix A shall be used in the determination of particulate emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |
| 3. Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack. | ADEM Admin. Code R.
335-3-1-.05 |

Section 4--Emission Monitoring

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| 1. Daily visible observations will be performed on the baghouse(s) each day it (they) is/are in operation by a person familiar with the baghouse(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the baghouse. | ADEM Admin. Code R.
335-3-1-.04 |
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Section 5--Recordkeeping and Reporting Requirements

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| 1. A log book of the daily visible observations and records of baghouse inspections and appropriate maintenance actions required in proviso 4.1 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes. | ADEM Admin. Code R.
335-3-1-.04 |
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Emission Unit No. 040 (RE-SAW OPERATIONS)

Operating Permit Summary No. 040

Emission Unit(s):

Re-Saw Operations with a Cyclone and Baghouse, Unit 040

Designation No(s). in Application:

Re-Saw Operations No. 40

Description:

Saws, Cyclone No. 6 and Baghouse No. 10

Permitted Operating Schedule:

24 hr/day x 365 days/yr = 8760 hr/yr

Type and quantity of fuel used:

Primary: None

Secondary: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6 minute average	SIP
Particulate	3.3 LBS/HR	SYNTHETIC MINOR PSD
PM ₁₀	3.3 LBS/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Unit Specific Provisos

Federally Enforceable Provisos	Regulations
<i>Section 1--Applicability</i>	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-4-.01
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-4-.04
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
4. This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-14-.03
<i>Section 2--Emission Standards</i>	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-4-.01
2. Emissions of particulate matter from this Unit shall not exceed 3.3 lbs./hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-14-.03
3. Emissions of particulate matter equal to or less than 10 microns from this Unit shall not exceed 3.3 lbs./hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-14-.03
4. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of: E = 3.59 (P ^{0.62}) where P is the process weight in tons/hr	ADEM Admin. Code R. 335-3-4-.04
<i>Section 3--Compliance and Performance Test Methods and Procedures</i>	
1. Method 9 as defined in 40 CFR 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-1-.05
2. Method 5 or 5a as defined in 40 CFR 60, Appendix A	ADEM Admin. Code R.

shall be used in the determination of particulate emissions from the stack.

335-3-1-.05

3. Method 201 or 201A as defined in 40 CFR Part 50, Appendix M shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.

ADEM Admin. Code R.
335-3-1-.05

Section 4--Emission Monitoring

1. Daily visible observations will be performed on the baghouse(s) each day it (they) is/are in operation by a person familiar with the baghouse(s) operation. If the opacity is greater than normal, an inspection and appropriate maintenance will be performed by personnel within 24 hours. After this occurs, another visible observation will be performed on the baghouse.

ADEM Admin. Code R.
335-3-1-.04

Section 5--Recordkeeping and Reporting Requirements

1. A log book of the daily visible observations and records of baghouse inspections and appropriate maintenance actions required in proviso 4.1 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.

ADEM Admin. Code R.
335-3-1-.04