

PERMITTEE:

FACILITY NAME:

FACILITY NO.:



MAJOR SOURCE OPERATING PERMIT

304-S008

WELLBORN CABINET, INC.

WELLBORN CABINET, INC.

LOCA	ΓΙΟN:	ASHLAND, CLAY COUNTY, AL	
22-28-1 to 22-28-23, as amende amended, and rules and regulat	d, the Alabama En ions adopted there	visions of the Alabama Air Pollution Control Act of 1971, <u>Ala. Code</u> §§ vironmental Management Act, <u>Ala. Code</u> §§ 22-22A-1 to 22-22A-17, as under, and subject further to the conditions set forth in this permit, the and use the equipment, device or other article described above.	
Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be State Permit Provisions and are not federally enforceable by EPA and citizens in general. Those Provisions are contained in separate sections of this Permit.			
ISSUANCE DATE:	DRAFT		
EFFECTIVE DATE:	DRAFT		
EXPIRATION DATE:	DRAFT		
		Alabama Dapartment of Environmental Management	
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General Permit Provisos

Federally Enforceable Provisos	Regulations
1. Transfer	
This Permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in ADEM Admin. Code R. 335-3-1613(1)(a)5.	ADEM Admin. Code R. 335-3-1602(6)
2. Renewals	
(a) 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.	ADEM Admin. Code R. 335-3-1612(2)
(b) The source for which this Permit is issued shall lose its right to operate upon the expiration of this Permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.	
3. Severability Clause	
The provisions of this Permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this Permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this Permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivisions, clause, or phrase of this Permit that shall be directly involved in the controversy in which such judgment shall have been rendered.	ADEM Admin. Code R. 335-3-1605(e)
4. Compliance	
(a) The permittee shall comply with all conditions of ADEM Admin. Code r. 335-3. Noncompliance with this Permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code r. 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.	ADEM Admin. Code R. 335-3-1605(f)
(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this Permit would have required halting or reducing the permitted activity.	ADEM Admin. Code R. 335-3-1605(g)
5. Termination for Cause	
This Permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.	ADEM Admin. Code R. 335-3-1605(h)
6. Property Rights	
The issuance of this Permit does not convey any property rights of any sort, or any exclusive privilege.	ADEM Admin. Code R. 335-3-1605(i)

Federall	y Enforceable Provisos	Regulations
7. Subn	nission of Information	
The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit or to determine compliance with this Permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this Permit.		ADEM Admin. Code R. 335-3-1605(j)
8. Econ	omic Incentives, Marketable Permits, and Emissions Trading	
No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Permit.		ADEM Admin. Code R. 335-3-1605(k)
9. Certi	fication of Truth, Accuracy, and Completeness:	
Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this Permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.		ADEM Admin. Code R. 335-3-1607(a)
10. Insp	pection and Entry	
Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:		ADEM Admin. Code R. 335-3-1607(b)
(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; and	
(d)	Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this Permit or other applicable requirements.	
11. Cor	npliance Provisions	
(a)	The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.	ADEM Admin. Code R. 335-3-1607(c)
(b)	The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this Permit.	
12. Compliance Certification		
(a)	A compliance certification shall be submitted annually within 60 days of the anniversary date of issuance of this Permit.	ADEM Admin. Code R. 335-3-1607(e)
	(1) The compliance certification shall include the following:	
		•

Federally Enforceable Provisos

Regulations

- (i) The identification of each term or condition of this Permit that is the basis of the certification;
- (ii) The compliance status;
- (iii) 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 Recordkeeping Requirements);
- (iv) Whether compliance has been continuous or intermittent; and
- (v) Such other facts as the Department may require to determine the compliance status of the source;
- (2) The compliance certification shall be submitted to:

Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463

and to:

Enforcement and Compliance Assurance Division EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303

13. Reopening for Cause

Under any of the following circumstances, this Permit will be reopened prior to the expiration of the permit:

ADEM Admin. Code R. 335-3-16-.13(5)

- (a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire.
- (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this Permit.
- (c) The Department or EPA determines that this Permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this Permit.
- (d) The Administrator or the Department determines that this Permit must be revised or revoked to assure compliance with the applicable requirements.

14. Additional Rules and Regulations

This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

§22-28-16(d), <u>Code of</u> Alabama 1975, as amended

Federally Enforceable Provisos Regulations 15. Equipment Maintenance or Breakdown (a) In case of shutdown of air pollution control equipment (which operates pursuant ADEM Admin. Code R. 335to any permit issued by the Director) for scheduled maintenance, the intent to 3-1-.07(1),(2) shut down shall be reported to the Department 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: (1) Identification of the specific facility to be taken out of service as well as its location and permit number; (2) The expected length of time that the air pollution control equipment will be out of service: (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period; (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and (5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period. (b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected. **16.** Operation of Capture and Control Devices All air pollution control devices and capture systems for which this Permit is issued §22-28-16(d), Code of shall be maintained and operated at all times in a manner so as to minimize the Alabama 1975, as amended 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. 17. Obnoxious Odors ADEM Admin. Code R. 335-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 3-1-.08 emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically

feasible.

18. Fugitive Dust

Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

ADEM Admin. Code R. 335-3-4-.02

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

Federally Enforceable Provisos

Regulations

- (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;
- (b) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) By paving;
- (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; or

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 Department prior to utilization.

19. Additions and Revisions

Any modifications to this source shall comply with the modification procedures in ADEM Admin. Code R. 335-3-16-.13 or 335-3-16-.14.

ADEM Admin. Code R. 335-3-16-.13 & .14

20. Recordkeeping Requirements

- (a) Records of required monitoring information of the source shall include the following:
 - (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.
- (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

ADEM Admin. Code R. 335-3-16-.05(c)2

21. Reporting Requirements

(a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with ADEM Admin. Code R. 335-3-16-.04(9).

ADEM Admin. Code R. 335-3-16-.05(c)3

(b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.

Federally Enforceable Provisos	Regulations
22. Emission Testing Requirements	
Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.	ADEM Admin. Code R. 335-3-105(3) ADEM Admin. Code R. 335-3-104(1)
The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.	
To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:	
(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, hoe many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.	ADEM Admin. Code R. 335-3-104
(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).	
(c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.	
(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.	
A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.	ADEM Admin. Code R. 335-3-104
All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.	
23. Payment of Emission Fees	
The permittee shall remit the annual Operating Permit Fees required by ADEM Admin. Code r. 335-1-704 according to the schedule in ADEM Admin. Code r. 335-1-705.	ADEM Admin. Code R. 335-1-704
The permittee shall submit its estimate of actual emissions for the previous calendar year according to the schedule in ADEM Admin. Code r. 335-1-705.	ADEM Admin. Code R. 335-1-705
24. Other Reporting and Testing Requirements	
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	ADEM Admin. Code R. 335-3-104(1)

testing at any time.

Federally Enforceable Provisos	Regulations	
25. Title VI Requirements (Refrigerants)		
Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in Appendices A and B to Subpart A of 40 CFR Part 82 shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.	40 CFR Part 82, Subpart F	
(a) No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.		
(b) The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.		
26. Chemical Accidental Prevention Provisions		
If a chemical listed in Table 1 of 40 CFR 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:	40 CFR Part 68	
(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.		
(b) The owner or operator shall submit one of the following:		
(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or		
(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.		
27. Display of Permit		
This Permit shall be kept under file or on display at all times at the site where This facility for which this Permit is issued is located and will make the permit readily available for inspection by any or all persons who may request to see it.	ADEM Admin. Code R. 335-3-1401(1)(d)	
28. Circumvention		
No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.	ADEM Admin. Code R. 335-3-110	
29. Visible Emissions		
Unless otherwise specified in the Unit Specific provisos of this Permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by Method 9 of Appendix A 4 to 40 CER Port 60, upless otherwise	ADEM Admin. Code R. 335-3-401(1)	

determined by Method 9 of Appendix A-4 to 40 CFR Part 60, unless otherwise

specified in the Unit Specific Provisos of this Permit.

Federally Enforceable Provisos	Regulations
30. Fuel-Burning Equipment	
(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. 335-3-403.	ADEM Admin. Code R. 335-3-403
(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. 335-3-501.	ADEM Admin. Code R. 335-3-501
31. Process Industries – General	
Unless otherwise specified in the Unit Specific provisos of this Permit, no process may discharge particulate emissions in excess of the emissions specified in ADEM Admin. Code R. 335-3-404.	ADEM Admin. Code R. 335-3-404
32. Averaging Time for Emission Limits	
Unless otherwise specified in the permit, the averaging time for the emission limits listed in this Permit shall be the nominal time required by the specific test method.	ADEM Admin. Code R. 335-3-105
33. Open Burning	
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.	ADEM Admin. Code R. 335-3-301

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary: NONE

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

Federally Enforceable Provisos			Regulations		
1 – Applicability					
1.	This unit is subje	ect to the SIP opacity emis	sion rate limits.		ADEM Admin. Code R. 335-3-401
2.	This unit is subjected General sources.	ect to the particulate emis	ssion rate limits for Proces	ss Industries -	ADEM Admin. Code R. 335-3-404
3.		abject to the applicable re Major Source Operating Pe	quirements of ADEM Ad rmits."	min. Code R.	ADEM Admin. Code R. 335-3-16.03
4.	335-3-1106(35)), "National Emission Operations" as a "New S	quirements of ADEM Ad Standards for Woo Source" and the General	od Furniture	ADEM Admin. Code R. 335-3-1106(35)
5.	This source is sul	bject to PSD-BACT emiss	sion limitations.		ADEM Admin. Code R. 335-3-1404
<u>2 -</u>	Emission Standa	<u>ards</u>			
1.	(20%), as determ	ined by a six (6) minute at (60) minute period, this u	ohere opacity greater than t verage. During one six (6) nit may discharge opacity	minute period	ADEM Admin. Code R. 335-3-401
2.		ot discharge into the atmoseral Permit Proviso 31.	phere particulate matter in	any one hour	ADEM Admin. Code R. 335-3-404
3.	Subpart JJ §	63.802 "National Emis	emissions standards of 40 sion Standards for Wo 3.802 (b)(1) through (b)(3)	od Furniture	ADEM Admin. Code R. 335-3-1106(35)
4.		applicator for all coating	pound of VHAPs per pour s as determined by a mo		ADEM Admin. Code R. 335-3-1106(35)
5.	•	C	pound of VHAPs per pour among other requirement		ADEM Admin. Code R. 335-3-1106(35)
6.	operations facility rolling 12-month	y-wide shall not exceed 71 a period based on the prea	nds (VOCs) from all su 7 tons per year (TPY) in an mise that all VOCs applied ating, storage, cleanup, and	ny consecutive d are emitted.	ADEM Admin. Code R. 335-3-1404(8)
7.	maximums nor		this unit shall not exceed verage VOC content per		ADEM Admin. Code R. 335-3-1404(8)
	Coating Type	Maximum content (lb-	Monthly Average (lb- VOC/gal- coating)		
	UV Coatings	VOC/gal- coating) 0.11	0.11		
	Stains	7.20	6.80		
	Sealers	5.00	4.50		
	Topcoats	7.20 4.30	5.00 4.15		
	Toners Glazes	6.50	6.35		
		•			

Federally Enforceable Provisos		Regulations
	Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.	
8.	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. 335-3-1404(8)
9.	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. 335-3-1404(8)
10.	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. 335-3-1404(8)
11.	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. 335-3-1404(8)
12.	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. 335-3-1404(8)
13.	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. 335-3-1404(8)
14.	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. 335-3-1106(35)
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)

Fed	erall	y Enforceable Provisos	Regulations
4 -	Emi	ssion Monitoring	
1.		VOC monitoring requirements in this permit shall be as required in ordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
2.	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. 335-3-104
<u>5 -</u>	Rec	cordkeeping and Reporting Requirements	
1.	five and reco	urate and understandable records of consumption, which record at least the last years of data, will be maintained in a permanent form suitable for inspection be available immediately upon request. This facility shall provide a copy of ords and supporting background documents upon request that pertain to this air nit. These records shall contain the following information:	ADEM Admin. Code R. 335-3-104
	(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.	shal date of a	ogbook of the visible emissions required in the Emission Monitoring section I be maintained, including the date, time, and results of each observation, the e, time, and results of any physical inspections performed, and the date and time ny cleaning, maintenance, or replacement. The logbook shall be retained for at t five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
3.	63	s source is subject to the applicable recordkeeping requirements of 40 CFR Part Subpart JJ § 63.806, "National Emission Standards for Wood Furniture nufacturing Operations" to include § 63.806 (a) through (e), and (h) through (j).	ADEM Admin. Code R. 335-3-1106(35)
4.	"Na	s source is subject to the applicable reporting requirements of 40 CFR 63.807, tional Emission Standards for Wood Furniture Manufacturing Operations" to ude § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)

Federally Enforceable Provisos	Regulations
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.	

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(35)
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404
<u>2 -</u>	Emission Standards	
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. 335-3-401
1.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
2.	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. 335-3-1106(35)
3.	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.	ADEM Admin. Code R. 335-3-1106(35)
4.	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.	ADEM Admin. Code R. 335-3-1106(35)
5.	Emissions 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. 335-3-1404(8)
6.	The VOC content of the coatings used on this unit shall not exceed the following maximums given in pounds of VOC per gallon of coating (lb-VOC/gal-coating) nor shall they exceed the average VOC content per coating type averaged over any calendar month given in lb-VOC/gal-coating:	ADEM Admin. Code R. 335-3-1404(8)
	(a) UV Coatings —	
	(1) Maximum: 0.11 lb-VOC/gal-coating	
	(2) Monthly Average: 0.11 lb-VOC/gal-coating	

Fed	Federally Enforceable Provisos Regulations				
	(b) Stains—				
	(1) Maximum: 7.20 lb-VOC/gal-coating				
	(2) Monthly Average: 6.80 lb-VOC/gal-coating				
	(c) Sealers—				
	(1) Maximum: 5.00 lb-VOC/gal-coating				
	(2) Monthly Average: 4.50 lb-VOC/gal-coating				
	(d) Topcoats —				
	(1) Maximum: 7.20 lb-VOC/gal-coating				
	(2) Monthly Average: 5.00 lb-VOC/gal-coating				
	(e) Toners				
	(1) Maximum: 4.30 lb-VOC/gal-coating				
	(2) Monthly Average: 4.15 lb-VOC/gal-coating				
	(f) Glazers —				
	(1) Maximum: 6.50 lb-VOC/gal-coating				
	(2) Monthly Average: 6.35 lb-VOC/gal-coating				
	(g) Calculations of VOC shall not include water or exempt VOC compounds a listed in ADEM Admin. Code 335-3.	6			
7.	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.	1404(8)			
8.	Coatings, solvents, and other VOC containing material will be handled in such 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 othe material used for VOC containing material cleanup or usage. Coatings and othe fresh or spent VOC coating material will be stored in closed airtight containers.	. 1404(8)			
9.	Particulate (PM) filters or water-wall filters shall be used on all coating booth area where PM is emitted. These shall be kept in good repair and changed as needed to maintain proper airflow in the booth.				
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.	1404(8)			

Fed	erally Enforceable Provisos	Regulations
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. 335-3-1404(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. 335-3-1106(35)
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
<u>5 -</u>	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. 335-3-104
	(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.	

eder	rally Enforceable Provisos	Regulations
((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.	
1	(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.	
s d	A logbook of the visible emissions required in the Emission Monitoring section hall be maintained, including the date, time, and results of each observation, the ate, time, and results of any physical inspections performed, and the date and time f any cleaning, maintenance, or replacement. The logbook shall be retained for at east five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
6	This source is subject to the applicable recordkeeping requirements of 40 CFR Part 3 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. 335-3-1106(35)
S	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. 335-3-1106(35)
S	A report summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be ubmitted 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. 335-3-104

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations
1 -	<u>Applicability</u>	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(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. 335-3-1106(35)
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404
<u>2 -</u>	Emission Standards	
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. 335-3-401
1.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
2.	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). 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.	ADEM Admin. Code R. 335-3-1106(35)
3.	Emissions 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. 335-3-1404(8)
4.	The VOC content of the coatings used on this unit shall not exceed the following maximums given in pounds of VOC per gallon of coating (lb-VOC/gal-coating) nor shall they exceed the average VOC content per coating type averaged over any calendar month given in lb-VOC/gal-coating:	ADEM Admin. Code R. 335-3-1404(8)
	(a) UV Coatings —	
	(1) Maximum: 0.11 lb-VOC/gal-coating	
	(2) Monthly Average: 0.11 lb-VOC/gal-coating	
	(b) Stains—	

Fed	erally Enforceable Provisos	Regulations
	(1) Maximum: 7.20 lb-VOC/gal-coating	
	(2) Monthly Average: 6.80 lb-VOC/gal-coating	
	(c) Sealers—	
	(1) Maximum: 5.00 lb-VOC/gal-coating	
	(2) Monthly Average: 4.50 lb-VOC/gal-coating	
	(d) Topcoats —	
	(1) Maximum: 7.20 lb-VOC/gal-coating	
	(2) Monthly Average: 5.00 lb-VOC/gal-coating	
	(e) Toners	
	(1) Maximum: 4.30 lb-VOC/gal-coating	
	(2) Monthly Average: 4.15 lb-VOC/gal-coating	
	(f) Glazers —	
	(1) Maximum: 6.50 lb-VOC/gal-coating	
	(2) Monthly Average: 6.35 lb-VOC/gal-coating	
	(g) Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.	
5.	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. 335-3-1404(8)
6.	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. 335-3-1404(8)
7.	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. 335-3-1404(8)
8.	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. 335-3-1404(8)

Fed	erally Enforceable Provisos	Regulations
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. 335-3-1404(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. 335-3-1404(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. 335-3-1106(35)
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
<u>5 -</u>	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. 335-3-104
	(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.	

Federally Enforceable Provisos	Regulations
(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 logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	3-104
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).	3-1106(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).	
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.	

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(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. 335-3-1106(35)
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
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). 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.	ADEM Admin. Code R. 335-3-1106(35)
4.	Emissions 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. 335-3-1404(8)
5.	The VOC content of the coatings used on this unit shall not exceed the following maximums given in pounds of VOC per gallon of coating (lb-VOC/gal-coating) nor shall they exceed the average VOC content per coating type averaged over any calendar month given in lb-VOC/gal-coating:	ADEM Admin. Code R. 335-3-1404(8)
	(a) UV Coatings —	
	(1) Maximum: 0.11 lb-VOC/gal-coating	
	(2) Monthly Average: 0.11 lb-VOC/gal-coating	
	(b)Stains —	

Fed	erally Enfor	ceable Provisos	Regulations
	(1) M	aximum: 7.20 lb-VOC/gal-coating	
	(2) M	onthly Average: 6.80 lb-VOC/gal-coating	
	(c)Sealers –	_	
	(1) M	aximum: 5.00 lb-VOC/gal-coating	
	(2) M	onthly Average: 4.50 lb-VOC/gal-coating	
	(d)Topcoats	· —	
	(1) M	aximum: 7.20 lb-VOC/gal-coating	
	(2) M	onthly Average: 5.00 lb-VOC/gal-coating	
	(e)Toners		
	(1) M	aximum: 4.30 lb-VOC/gal-coating	
	(2) M	onthly Average: 4.15 lb-VOC/gal-coating	
	(f)Glazers -	_	
	(1) M	aximum: 6.50 lb-VOC/gal-coating	
	(2) M	onthly Average: 6.35 lb-VOC/gal-coating	
	-	ons of VOC shall not include water or exempt VOC compounds d 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. 335-3-1404(8)
7.	a way as to cleanup. Clo or other mate	elvents, and other VOC containing material will be handled in such minimize VOC emissions from storage, handling, coating, and osed containers shall be used for the storage and disposal of cloth erial used for VOC containing material cleanup or usage. Coatings esh or spent VOC coating material will be stored in closed airtight	ADEM Admin. Code R. 335-3-1404(8)
8.	areas where	PM) filters or water-wall filters shall be used on all coating booth PM is emitted. These shall be kept in good repair and changed as aintain proper airflow in the booth.	ADEM Admin. Code R. 335-3-1404(8)
9.	may be used month perio	lese units shall use heat supplied by permitted boilers. Natural gas as a backup fuel for up to 1000 hours per consecutive rolling 12-d on the Overhead Line No. 1, Overhead Line No. 2, and Flat Line rds will be kept of the time the natural gas is being fired.	ADEM Admin. Code R. 335-3-1404(8)

Federally Enforceable Provisos		Regulations
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. 335-3-1404(8)
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. 335-3-1404(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. 335-3-1106(35)
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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.	
<u>5 -</u>	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. 335-3-104
	(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.	

ederally Enforceable Provisos			Regulations	
	(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.	sect obse and logb	ogbook of the visible emissions required in the Emission Monitoring ion shall be maintained, including the date, time, and results of each ervation, the date, time, and results of any physical inspections performed, the date and time of any cleaning, maintenance, or replacement. The book shall be retained for at least five years and available for inspection in request.	ADEM Admin. Code R. 335-3-104	
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).		63 Subpart JJ § 63.806, "National Emission Standards for Wood niture Manufacturing Operations" to include § 63.806 (a) through (e), and	ADEM Admin. Code R. 335-3-1106(35)	
4.	63 \$	s source is subject to the applicable reporting requirements of 40 CFR Part Subpart JJ § 63.807, "National Emission Standards for Wood Furniture nufacturing Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)	
5.	be s	eport summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall ubmitted each calendar quarter by the 10th day of the month following the of the quarter, in a format approved by the Department in advance.	ADEM Admin. Code R. 335-3-104	

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(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. 335-3-1106(35)
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404
2 -	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
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). 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.	ADEM Admin. Code R. 335-3-1106(35)
4.	Emissions 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. 335-3-1404(8)
5.	The VOC content of the coatings used on this unit shall not exceed the following maximums given in pounds of VOC per gallon of coating (lb-VOC/gal-coating) nor shall they exceed the average VOC content per coating type averaged over any calendar month given in lb-VOC/gal-coating:	ADEM Admin. Code R. 335-3-1 .04(8)
	(a) UV Coatings —	
	(1) Maximum: 0.11 lb-VOC/gal-coating	
	(2) Monthly Average: 0.11 lb-VOC/gal-coating	
	(b)Stains —	

Fed	erally En	forceable Provisos	Regulations
	(1)	Maximum: 7.20 lb-VOC/gal-coating	
	(2)	Monthly Average: 6.80 lb-VOC/gal-coating	
	(c)Seale	rs —	
	(1)	Maximum: 5.00 lb-VOC/gal-coating	
	(2)	Monthly Average: 4.50 lb-VOC/gal-coating	
	(d)Topco	pats —	
	(1)	Maximum: 7.20 lb-VOC/gal-coating	
	(2)	Monthly Average: 5.00 lb-VOC/gal-coating	
	(e)Toner	$\mathcal{L}_{\mathcal{L}}$	
	(1)	Maximum: 4.30 lb-VOC/gal-coating	
	(2)	Monthly Average: 4.15 lb-VOC/gal-coating	
	(f)Glaze	ers —	
	(1)	Maximum: 6.50 lb-VOC/gal-coating	
	(2)	Monthly Average: 6.35 lb-VOC/gal-coating	
	-	lations of VOC shall not include water or exempt VOC compounds sted in ADEM Admin. Code 335-3.	
6.	equipme or greate applicati the Depa sealers a	ns shall be applied with high volume low pressure (HVLP) spray nt or equipment with an equivalent transfer efficiency (TE) of 65% r. Air Pressure shall not exceed 10 psig in HVLP spray equipment at on. Other application technology may be substituted if approved by artment in writing in advance. Testing of TE may be required. The nd topcoats will be applied with air assisted airless spray equipment ment with an equivalent transfer efficiency of 65% or greater.	ADEM Admin. Code R. 335-3-1404(8)
7.	a way as cleanup. or other Coatings	s, solvents, and other VOC containing material will be handled in such a to minimize VOC emissions from storage, handling, coating, and Closed containers shall be used for the storage and disposal of cloth material used for VOC containing material cleanup or usage, and other fresh or spent VOC coating material will be stored in rtight containers.	ADEM Admin. Code R. 335-3-1404(8)
8.	areas wh	te (PM) filters or water-wall filters shall be used on all coating booth ere PM is emitted. These shall be kept in good repair and changed as o maintain proper airflow in the booth.	ADEM Admin. Code R. 335-3-1404(8)
9.	economi of utilizi and othe trials wit Progress	n will utilize new technology if it becomes technically and cally feasible. Wellborn shall continue to investigate the feasibility ng lower solvent coatings, high solids coatings, waterborne coatings, or lower VOC content coatings by continued experimentation and h new coatings and through continued contact with coating suppliers. in the search for lower VOC content coatings shall be summarized rt along with the fourth quarter report of VOC emissions annually.	ADEM Admin. Code R. 335-3-1404(8)

Federally Enforceable Provisos	Regulations
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. 335-3-1404(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. 335-3-1106(35)
3 - Compliance and Performance Test Methods and Procedures	
1. Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2. Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
4 – Emission Monitoring	
1. The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-104
(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.	

Federally Enforceable Provisos		y Enforceable Provisos	Regulations
((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.	
s c a 1	sectiobse and logb	ogbook of the visible emissions required in the Emission Monitoring on shall be maintained, including the date, time, and results of each ervation, the date, time, and results of any physical inspections performed, the date and time of any cleaning, maintenance, or replacement. The ook shall be retained for at least five years and available for inspection a request.	ADEM Admin. Code R. 33 3-104
F F	Part Furr	source is subject to the applicable recordkeeping requirements of 40 CFR 63 Subpart JJ § 63.806, "National Emission Standards for Wood iture Manufacturing Operations" to include § 63.806 (a) through (e), and hrough (j).	ADEM Admin. Code R. 33 3-1106(35)
6	53 S	source is subject to the applicable reporting requirements of 40 CFR Part Subpart JJ § 63.807, "National Emission Standards for Wood Furniture sufacturing Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 33 3-1106(35)
t	be s	port summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall ubmitted each calendar quarter by the 10th day of the month following and of the quarter, in a format approved by the Department in advance.	ADEM Admin. Code R. 33 3-104

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 Application: UV Panel Coater No. 6

Description: (Panel) Two (2) Sealer areas, One (1) Topcoat area, and

One (1)

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: None Secondary: None

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

- Chit Specific 1 10 visos			
Federall	y Enforceable Provisos	Regulations	
1 – App	<u>licability</u>		
	se sources are subject to the applicable requirement of ADEM Admin. Code 35-3-1603, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-1603	
2 - Emi	ssion Standards		
	se sources are subject to no additional specific requirements other than those d in the General Permit Provisos.		
<u>3 - Con</u>	apliance and Performance Test Methods and Procedures		
dete	VOCs content by weight of each VOC containing material used shall be armined using EPA Test Method 24, as defined in Appendix A to 40 CFR Part Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-105	
dete	HAPs content by weight of each HAPs containing material used shall be rmined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A. dor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-105	
<u>4 – Emi</u>	ssion Monitoring		
	monitoring requirements in this permit section shall be as required in ordkeeping and Reporting Requirements.		
<u>5 – Rec</u>	ordkeeping and Reporting Requirements		
five and reco	urate and understandable records of consumption, which record at least the last years of data, will be maintained in a permanent form suitable for inspection be available immediately upon request. This facility shall provide a copy of ords and supporting background documents upon request that pertain to this air nit. These records shall contain the following information:	ADEM Admin. Code R. 335-3-104	
(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.		

Federally Enforceable Provisos	Regulations
(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 Application: UV Mold Coater, Unit 007

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: None Secondary: None

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

- Chit Specific 1 10 visos			
Federall	y Enforceable Provisos	Regulations	
1 – App	<u>licability</u>		
	se sources are subject to the applicable requirement of ADEM Admin. Code 35-3-1603, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-1603	
<u>2 – Emi</u>	ssion Standards		
	se sources are subject to no additional specific requirements other than those d in the General Permit Provisos.		
<u>3 - Com</u>	npliance and Performance Test Methods and Procedures		
dete	VOCs content by weight of each VOC containing material used shall be rmined using EPA Test Method 24, as defined in Appendix A to 40 CFR Part Vendor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-105	
dete	HAPs content by weight of each HAPs containing material used shall be rmined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A. dor data based on this method is an appropriate substitute.	ADEM Admin. Code R. 335-3-105	
<u>4 – Emi</u>	ssion Monitoring		
	monitoring requirements in this permit section shall be as required in ordkeeping and Reporting Requirements.		
<u>5 – Reco</u>	ordkeeping and Reporting Requirements		
five and reco	urate and understandable records of consumption, which record at least the last years of data, will be maintained in a permanent form suitable for inspection be available immediately upon request. This facility shall provide a copy of rds and supporting background documents upon request that pertain to this air nit. These records shall contain the following information:	ADEM Admin. Code R. 335-3-104	
(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.		

Federally Enforceable Provisos	Regulations
(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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: None Secondary: None

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

Fed	erally Enforceable Provisos	Regulations
<u>1 -</u>	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(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. 335-3-1106(35)
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
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). 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.	ADEM Admin. Code R. 335-3-1106(35)
	Emissions 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. 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	ADEM Admin. Code R. 335-3-1404(8)
6.	Manufacturing Operations" to include § 63.803 (a) through (l). The VOC content of the coatings used on this unit shall not exceed the following maximums given in pounds of VOC per gallon of coating (lb VOC/gal coating) per	ADEM Admin. Code R. 335-
	maximums given in pounds of VOC per gallon of coating (lb-VOC/gal-coating) nor shall they exceed the average VOC content per coating type averaged over any calendar month given in lb-VOC/gal-coating:	3-1404(8)
	(a)UV Coatings —	
	(1) Maximum: 0.11 lb-VOC/gal-coating	
	(2) Monthly Average: 0.11 lb-VOC/gal-coating	

Federally Enforceable Provisos	Regulations
(b)Stains —	
(1) Maximum: 7.20 lb-VOC/gal-coating	
(2) Monthly Average: 6.80 lb-VOC/gal-coating	
(c)Sealers —	
(1) Maximum: 5.00 lb-VOC/gal-coating	
(2) Monthly Average: 4.50 lb-VOC/gal-coating	
(d)Topcoats —	
(1) Maximum: 7.20 lb-VOC/gal-coating	
(2) Monthly Average: 5.00 lb-VOC/gal-coating	
(e)Toners	
(1) Maximum: 4.30 lb-VOC/gal-coating	
(2) Monthly Average: 4.15 lb-VOC/gal-coating	
(f)Glazers —	
(1) Maximum: 6.50 lb-VOC/gal-coating	
(2) Monthly Average: 6.35 lb-VOC/gal-coating	
(g)Calculations of VOC shall not include water or exempt VOC compounds as listed in ADEM Admin. Code 335-3.	
3 - Compliance and Performance Test Methods and Procedures	
1. Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2. Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
4 - Emission Monitoring	
 The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements. 	ADEM Admin. Code R. 335-3-104
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. 335-3-104

Fed	erally Enforceal	Regulations	
<u>5</u> –	Recordkeeping		
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. 335-3-104
		quantity in gallons, and weight in pounds of each VOC or HAP material used during each calendar month.	
		t by weight of VOCs, water, solids, VHAPs, and exempt VOC content of each VOC containing material used each calendar	
		t by volume of VOCs, water, solids, VHAPs, and exempt VOC content of each VOC containing material used each calendar	
	use invento	e with VOC and VHAP limits shall be based upon monthly material ories. Emissions may be adjusted for VOC and VHAP content of moved from the plant as waste or returns if the record keeping and ounding the materials are approved in advance.	
		nventories of the VOC and HAP containing materials (their usage, nt and VHAP content) shall be made at the end of each calendar	
		nt of VOCs emitted per calendar month from the coating and perations in units of pounds and tons	
		12-month total of VOCs emitted from the coating and cleaning in units of pounds and tons.	
2.	shall be maintai date, time, and r of any cleaning,	ne visible emissions required in the Emission Monitoring section ned, including the date, time, and results of each observation, the esults of any physical inspections performed, and the date and time maintenance, or replacement. The logbook shall be retained for at and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
3.	63 Subpart JJ	bject to the applicable recordkeeping requirements of 40 CFR Part § 63.806, "National Emission Standards for Wood Furniture Operations" to include § 63.806 (a) through (e), and (h) through (j).	ADEM Admin. Code R. 335-3-1106(35)
4.	Subpart JJ §	abject to the applicable reporting requirements of 40 CFR Part 63 63.807, "National Emission Standards for Wood Furniture Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)
5.	submitted each	arizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be calendar quarter by the 10th day of the month following the end of format approved by the Department in advance.	ADEM Admin. Code R. 335-3-104

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: NONE Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations		
<u>1 -</u>	Applicability			
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401		
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404		
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1106(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. 335-3-1106(35)		
5.	This source is subject to PSD-BACT emission limitations.	ADEM Admin. Code R. 335-3-1404		
<u>2 -</u>	Emission Standards			
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. 335-3-401		
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404		
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). 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.	ADEM Admin. Code R. 335-3-1106(35)		
4.	Emissions 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. 335-3-1404(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. 335-3-1404(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. 335-3-1404(8)		

Fed	erally Enforceable Provisos	Regulations
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. 335-3-1404(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. 335-3-1106(35)
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-1106(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. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
<u>5 -</u>	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. 335-3-104
	(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.	

Federally Enforceable Provisos			Regulations
	(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.	shal date of a	ogbook of the visible emissions required in the Emission Monitoring section I be maintained, including the date, time, and results of each observation, the time, and results of any physical inspections performed, and the date and time my cleaning, maintenance, or replacement. The logbook shall be retained for at the five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
3.	63	s source is subject to the applicable recordkeeping requirements of 40 CFR Part Subpart JJ § 63.806, "National Emission Standards for Wood Furniture nufacturing Operations" to include § 63.806 (a) through (e), and (h) through	ADEM Admin. Code R. 335-3-1106(35)
4.	Sub	s source is subject to the applicable reporting requirements of 40 CFR Part 63 part JJ § 63.807, "National Emission Standards for Wood Furniture nufacturing Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)
5.	subi	eport summarizing the information in provisos 5.1, 5.2, 5.3 and 5.4 shall be mitted each calendar quarter by the 10th day of the month following the end of quarter, in a format approved by the Department in advance.	ADEM Admin. Code R. 335-3-104

Emission Unit No. 011 (Two Automated Spray Lines (ASL) with RTO-1 and Baghouse Operating Permit Summary No. 11

Emission Unit(s): Wooden Furniture Surface Coating,

Unit 011

Designation No(s). in Application: Lines No. 1 and No. 2

Description: Two Automated Spray Lines Nos. 1 and 2 with

Associated RTO-1 and Baghouse

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

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	Synthetic Minor PSD
	12-month period	
PM/PM ₁₀ /PM _{2.5}	24.5/14.5/9.5 tons per rolling 12-	Synthetic Minor PSD
	month period	

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This Unit is subject to PSD synthetic minor emission limitations.	ADEM Admin. Code R. 335-3-1404
2.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1106(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. 335-3-1106(35)
<u>2 -</u>	Emission Standards	
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.	ADEM Admin. Code R. 335-3-1404(8)
2.	Emissions of Particulate Matter (PM/PM $_{10}$ /PM $_{2.5}$) from Unit X011 shall not exceed (24.5/14.5/9.5) tons during any consecutive 12-month period.	ADEM Admin. Code R. 335-3-1404(8)
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 0% capture and destruction of VOC in the RTO.	ADEM Admin. Code R. 335-3-1404(8)
4.	This Unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six-minute average. During one six-minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-404
5.	This Unit shall not discharge into the atmosphere particulate matter in and one hour in excess of $E=3.59(P^{0.62})$. Where E is the particulate emissions in lb/hr and P is the process weight in tons/hr.	ADEM Admin. Code R. 335-3-404
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. 335-3-1106(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.	
<u>3 -</u>	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.	ADEM Admin. Code R. 335-3-1106(35)
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.	ADEM Admin. Code R. 335-3-104

Fed	erally Enforceable Provisos	Regulations
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.	ADEM Admin. Code R. 335-3-1106(35)
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. 335-3-1106(35)
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	ADEM Admin. Code R. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC and PM/PM $_{10}$ monitoring requirements in this permit shall be as required in Section 5—Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
2.	The permittee shall conduct a performance test within 5 years of the previous performance test.	ADEM Admin. Code R. 335-3-1605
	A notification of performance testing must be submitted to the Department at least 10 calendar days prior to the date of the scheduled performance test.	
	A report summarizing the results of the performance test must be submitted to the Department within 30 days of the completion of the performance test.	
<u>5 -</u>	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. 335-3-104
	(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.	

Federally Enforceable Provisos			Regulations
	(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.	
	retai reco	ords of Unit X011 inspections and appropriate maintenance actions shall be ned for at least five years and available for inspection upon request. This rdkeeping should also include the nature and date of any maintenance actions in to correct the problem(s).	ADEM Admin. Code R. 335-3-104
	(a) (b) (c) (d) (e) (f)	ritten report for the RTO shall be submitted to the Air Division along with the sion reports. The report shall provide the following information, as applicable. The quantity of solvents of VOC and HAP in the coating applied. The amount of VOC and HAP vented to the RTO by Unit X011. The estimated average DRE of the RTO. The amount of VOC and HAP released or exhausted into the atmosphere by Unit X011. The overall reduction of the VOC and HAP emissions from Unit X011. The time and date of any and all periods of coating operations where the temperature of the RTO is below the established minimum temperature. The cumulative or total quantity of VOC and HAP released or exhausted into the atmosphere during the applicable month and previous eleven months.	ADEM Admin. Code R. 335-3-104
		on the bypassing occurs on the RTO, the time, date, duration and estimated and HAP emissions must be recorded	ADEM Admin. Code R. 335-3-104
	63	source is subject to the applicable recordkeeping requirements of 40 CFR Part Subpart JJ §63.806, "National Emission Standards of Wood Furniture ufacturing Operations" to include §63.806(a) through (e), and (h) through (j)	ADEM Admin. Code R. 335-3-1106(35)
	Subj	source is subject to the applicable reporting requirements of 40 CFR Part 63 part JJ § 63.807, "National Emission Standards for Wood Furniture ufacturing Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)
	be su	port summarizing the information in provisos 5.1, 5.2, 5.3, 5.4, and 5.6 shall abmitted each calendar quarter by the 10th day of the month following the end the quarter, in a format approved by the Department in advance.	ADEM Admin. Code R. 335-3-104

Emission Unit No. 012 (Two Automated Spray Lines (ASL) with RTO-2 and Baghouse Operating Permit Summary No. 12

Emission Unit(s): Wooden Furniture Surface Coating,

Unit 012

Designation No(s). in Application: Lines No. 3 and No. 4

Description: Two Automated Spray Lines Nos. 3 and 4 with

Associated RTO-2 and Baghouse

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

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	Synthetic Minor PSD
	12-month period	
PM/PM ₁₀ /PM _{2.5}	24.5/14.5/9.5 tons per rolling 12-	Synthetic Minor PSD
	month period	

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This Unit is subject to PSD synthetic minor emission limitations.	ADEM Admin. Code R. 335-3-1404
2.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits."	ADEM Admin. Code R. 335-3-16.03
3.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1106(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. 335-3-1106(35)
<u>2 -</u>	Emission Standards	
1.	Emissions of Volatile Organic Compounds (VOC) for Unit X012 shall not exceed 39.5 tons per year (TPY), in any consecutive rolling 12-month period.	ADEM Admin. Code R. 335-3-1404(8)
2.	Emissions of Particulate Matter (PM/PM $_{10}$ /PM $_{2.5}$) from Unit X012 shall not exceed (24.5/14.5/9.5) tons during any consecutive 12-month period.	ADEM Admin. Code R. 335-3-1404(8)
3.	Unit X012 shall vent to the RTO when operating. If Unit X012's exhausts bypass the RTO the VOC must be calculated and reported as if there was 0% capture and destruction of VOC in the RTO.	ADEM Admin. Code R. 335-3-1404(8)
4.	This Unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six-minute average. During one six-minute period during any sixty (60) minute period, this unit may discharge opacity not exceeding forty (40%) percent.	ADEM Admin. Code R. 335-3-404
5.	This Unit shall not discharge into the atmosphere particulate matter in and one hour in excess of $E=3.59(P^{0.62})$. Where E is the particulate emissions in lb/hr and P is the process weight in tons/hr.	ADEM Admin. Code R. 335-3-404
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. 335-3-1106(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.	
<u>3 -</u>	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.	ADEM Admin. Code R. 335-3-1106(35)
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.	ADEM Admin. Code R. 335-3-104

Fed	erally Enforceable Provisos	Regulations
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.	ADEM Admin. Code R. 335-3-1106(35)
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. 335-3-1106(35)
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	ADEM Admin. Code R. 335-3-1106(35)
<u>4 -</u>	Emission Monitoring	
1.	The VOC and PM/PM_{10} monitoring requirements in this permit shall be as required in Section 5—Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
2.	The permittee shall conduct a performance test within 5 years of the previous performance test.	ADEM Admin. Code R. 335-3-1605
	A notification of performance testing must be submitted to the Department at least 10 calendar days prior to the date of the scheduled performance test.	
	A report summarizing the results of the performance test must be submitted to the Department within 30 days of the completion of the performance test.	
<u>5 -</u>	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. 335-3-104
	(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.	

Fede	erally	y Enforceable Provisos	Regulations
	(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.	
	retai reco	ords of Unit X012 inspections and appropriate maintenance actions shall be ned for at least five years and available for inspection upon request. This rdkeeping should also include the nature and date of any maintenance actions in to correct the problem(s).	ADEM Admin. Code R. 335-3-104
3.	(a) (b) (c) (d) (e) (f)	ritten report for the RTO shall be submitted to the Air Division along with the sion reports. The report shall provide the following information, as applicable. The quantity of solvents of VOC and HAP in the coating applied. The amount of VOC and HAP vented to the RTO by Unit X012. The estimated average DRE of the RTO. The amount of VOC and HAP released or exhausted into the atmosphere by Unit X012. The overall reduction of the VOC and HAP emissions from Unit X012. The time and date of any and all periods of coating operations where the temperature of the RTO is below the established minimum temperature. The cumulative or total quantity of VOC and HAP released or exhausted into the atmosphere during the applicable month and previous eleven months.	ADEM Admin. Code R. 335-3-104
4.		en the bypassing occurs on the RTO, the time, date, duration and estimated and HAP emissions must be recorded	ADEM Admin. Code R. 335-3-104
5.	63	source is subject to the applicable recordkeeping requirements of 40 CFR Part Subpart JJ §63.806, "National Emission Standards of Wood Furniture sufacturing Operations" to include §63.806(a) through (e), and (h) through (j)	ADEM Admin. Code R. 335-3-1106(35)
6.	Subj	source is subject to the applicable reporting requirements of 40 CFR Part 63 part JJ § 63.807, "National Emission Standards for Wood Furniture sufacturing Operations" to include § 63.807 (a) through (c), and (e).	ADEM Admin. Code R. 335-3-1106(35)
7.	be su	port summarizing the information in provisos 5.1, 5.2, 5.3, 5.4, and 5.6 shall abmitted each calendar quarter by the 10th day of the month following the end be quarter, in a format approved by the Department in advance.	ADEM Admin. Code R. 335-3-104

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 Application:

Description:

No. 1 Power Boiler

29.5 MMBtu/hr Wood Waste Gasification Boiler with

Multiclone and ESP Control Device

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: WET BIOMASS

Secondary: NONE

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	23.6 LB/HR OR 0.400 LB/MMBTU	BACT-PSD
	1,100 PPM @ 3% O2	
		40 CFR, Part 63, Subpart 5-D
NO_X	14.75 LB/HR OR 0.50 LB/MMBTU	BACT-PSD
Particulate	5.69 LB/HR OR 0.0390	BACT-PSD
	GRAINS/DSCF	
PM_{10}	3.41 LB/HR OR 0.0270	BACT-PSD
	GRAINS/DSCF	
Filterable PM	0.043 lb/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS D_C
Opacity	20% as determined by a 6-minute	SIP
	average	
	10% without Wet Scrubber	40 CFR, Part 63, Subpart 5-D
SO_2	9.0 LB/HR	BACT-PSD
VOCs	9.0 LB/HR	BACT-PSD
HYDROGEN CHLORIDE (HCL)	0.022 LB/MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
	INPUT	
	INI O I	
MERCURY (HG)	5.7E-06 MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
	INPUT	
	11/101	

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to a particulate (PM) PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
3.	This unit is subject to a PM ₁₀ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a VOCs PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
5.	This unit is subject to a SO ₂ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
6.	This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
7.	This unit is subject to a CO PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
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 $D_{\rm c}$.	ADEM Admin. Code R. 335-3-1002
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. 335-3-1106
<u>2 -</u>	Emission Standards	
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. 335-3-401
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. 335-3-1403
3.	The particulate emission rate shall not exceed $0.17~\rm gr/dscf$ adjusted to $50\%~\rm excess$ 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. 335-3-408
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. 335-3-1002
5.	Emissions of CO from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 23.6 lb /hr or 0.400 lb /MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 10.	ADEM Admin. Code R. 335-3-1403

Federally Enforceable Provisos		Regulations
6.	CO emission concentrations shall not exceed 1,100 ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
7.	Emissions of particulate matter from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 5.69 lb /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. 335-3-1403
8.	Emissions of Filterable PM shall not exceed 0.043 lb/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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 lb /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. 335-3-1403
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. 335-3-1403
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. 60-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. 335-3-1403
12.	Emissions of SO_2 from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 9.0 lb/hr in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.	ADEM Admin. Code R. 335-3-1403
13.	Emissions of VOCs from this wood gasification boiler and the boiler in Permit No. $304\text{-}S008\text{-}0022$ shall not exceed 9.0 lb/hr in accordance with 40 CFR Part 60, Appendix A, Method 25A.	ADEM Admin. Code R. 335-3-1403
14.	Emissions of NOx from this wood gasification boiler and the boiler in Permit No. 304-S008-0022 shall not exceed 14.750 lb /hr or 0.500 lb /MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.	ADEM Admin. Code R. 335-3-1403
15.	Emissions of Mercury (Hg) shall not exceed $5.7E^{-06}lb$ / MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
16.	Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lb /MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1106
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. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105

Federally Enforceable Provisos			Regulations
2.	Method 5 or 17 as defined in Appendix A to 40 CFR Part 60 determination of particulate emissions from the stack.) shall be used in the	ADEM Admin. Code R. 335-3-105
3.	Method 201 or 201A as defined in 40 CFR Part 50, Appenditude the determination of particulate matter equal to or less than 1 from the stack.		ADEM Admin. Code R. 335-3-105
4.	Method 6 or 6C as defined in Appendix A to 40 CFR Part 60 determination of sulfur dioxide emissions from the stack.) shall be used in the	ADEM Admin. Code R. 335-3-105
5.	Method 10 as defined in Appendix A to 40 CFR Part 60 determination of carbon monoxide emissions from the stack.	shall be used in the	ADEM Admin. Code R. 335-3-105
6.	Method 7 or 7E as defined in Appendix A to 40 CFR Part 60 determination of nitrogen oxides emissions from the stack.) shall be used in the	ADEM Admin. Code R. 335-3-105
7.	Method 25A as defined in Appendix A to 40 CFR Part 60 determination of volatile organic compounds emissions from		ADEM Admin. Code R. 335-3-105
<u>4 -</u>	Emission Monitoring		
1.	Emissions tests are to be conducted for the following polluta exceed annual testing following the date of initial complia reports must be submitted to the Department within 30 datesting: Particulates (X) Carbon Monoxide (X) PM $_{10}$ (X) Sulfur Dioxide () Nitrogen Oxides (X) Volatile Organic Compounds () Visible Emissions (X)	nce testing. All test	ADEM Admin. Code R. 335-3-104
2.	Conduct annual emission testing for HCl and Hg or conduct mand analysis (upon preparation of site-specific fuel plan). If 75% of the limit on two consecutive tests, testing can be reduyears. (40 CFR 63, Subpart 5-D, Tables 5, 6 and 8). The comp 31, 2016.	test results are below ced to once per three	ADEM Admin. Code R. 335-3-1106
3.	Conduct annual emission testing for a given pollutant if two tests are less the 75% of the applicable limit, testing can be three years (40 CFR Part 63, Subpart 5-D, Tables 4, 7 and 8). is January 31, 2016.	reduced to once per	ADEM Admin. Code R. 335-3-1106
4.	Install and operate Continuous Oxygen Monitoring System Subpart 5-D, Table 8). The compliance date is January 31, 20	-	ADEM Admin. Code R. 335-3-1106
5.	Install and operate Continuous Opacity Monitoring System Subpart 5-D, Table 8). The compliance date is January 31, 20		ADEM Admin. Code R. 335-3-1106
6.	Establish operating load limit during performance test (40 C 5-D, Table 8). The compliance date is January 31, 2016.	CFR Part 63, Subpart	ADEM Admin. Code R. 335-3-1106
7.	Submission of other reports regarding monitoring records, fur rates, and equipment malfunctions may be required as Department's air pollution control rules and regulations. Trequire stack emission testing at any time.	authorized in the	ADEM Admin. Code R. 335-3-104 ADEM Admin. Code R. 335-3-1106

Federally Enforceable Provisos		Regulations
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.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-104
12.	The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
<u>5 -</u>	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. 335-3-104
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 PM_{10} 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. A. lb PM/MMBTU input and B. lb PM $_{10}/MMBTU$ 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 = $\{(1201.95 \text{ BTU/lb at } 275 \text{ psi}) \times (\text{lb of steam generated (from recorder)})\} / \{0.68 \text{ (boiler efficiency)}\}$ The lowest steam flowrate in a particular hour shall be the steam flowrate used for that particular hour in the above calculation.	ADEM Admin. Code R. 335-3-104
4.	Consecutive rolling 12-month PM and PM_{10} emissions for these boilers shall be determined by summing daily PM and PM_{10} emissions, which shall be calculated using the following formulas: A. PM (Ib/day) = (PM $Ib/MMBTU$ input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3)	ADEM Admin. Code R. 335-3-104

Fed	erally Enforceable Provisos	Regulations
	B. B. PM_{10} (lb/day) = (PM10 lb/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.	
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 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. 335-3-104
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.	ADEM Admin. Code R. 335-3-104
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. 335-3-1002
8.	A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-1106

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 Application:

Description:

No. 2 Power Boiler

29.5 MMBtu/hr Wood Waste Gasification Boiler with

Multiclone and ESP Control Device

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: WET BIOMASS

Secondary: NONE

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	23.6 LB/HR OR 0.400 LB/MMBTU	BACT-PSD
	1,100 PPM @ 3% O2	
		40 CFR, Part 63, Subpart 5-D
NO_X	14.75 LB/HR OR 0.50 LB/MMBTU	BACT-PSD
Particulate	5.69 LB/HR OR 0.0390	BACT-PSD
	GRAINS/DSCF	
	0.039 LB/MMBTU, 3 RUN	40 CFR, Part 63, Subpart 5-D
	AVERAGE	
PM_{10}	3.41 LB/HR OR 0.0270	BACT-PSD
	GRAINS/DSCF	
Filterable PM	0.043 lb/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS D _C
Opacity	20% as determined by a 6-minute	SIP
	average	
	10% without Wet Scrubber	40 CFR, Part 63, Subpart 5-D
SO_2	9.0 LB/HR	BACT-PSD
VOCs	9.0 LB/HR	BACT-PSD
HYDROGEN CHLORIDE (HCL)	0.022 LB/MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
	INPUT	
MERCURY (HG)	5.7E-06 MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
	INPUT	

Federally Enforceable Provisos		Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to a particulate PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
3.	This unit is subject to a PM ₁₀ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a VOCs PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
5.	This unit is subject to a SO ₂ PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
6.	This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
7.	This unit is subject to a CO PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
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 $D_{\rm c}$.	ADEM Admin. Code R. 335-3-1002
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. 335-3-1106
<u>2 -</u>	Emission Standards	
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. 335-3-401
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. 335-3-1403
3.	The particulate emission rate shall not exceed 0.17 gr/dscf 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. 335-3-408
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. 335-3-1002
5.	Emissions of CO from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 23.6 lb /hr or 0.400 lb /MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 10.	ADEM Admin. Code R. 335-3-1403

Federally Enforceable Provisos		Regulations
6.	CO emission concentrations shall not exceed 1,100 ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
7.	Emissions of particulate matter from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 5.69 lb /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. 335-3-1403
8.	Emissions of Filterable PM shall not exceed 0.043 lb/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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 lb /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. 335-3-1403
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. 335-3-1403
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. 335-3-1403
12.	Emissions of SO_2 from this wood gasification boiler and the boiler in Permit No. 304-S008-0021 shall not exceed 9.0 lb /hr in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.	ADEM Admin. Code R. 335-3-1403
13.	Emissions of VOCs from this wood gasification boiler and the boiler in Permit No. $304\text{-}S008\text{-}0021$ shall not exceed 9.0 lb /hr in accordance with 40 CFR Part 60, Appendix A, Method 25A.	ADEM Admin. Code R. 335-3-1403
14.	Emissions of NOx from this wood gasification boiler and the boiler in Permit No. $304\text{-}S008\text{-}0021$ shall not exceed 14.750 lb /hr or 0.500 lb /MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.	ADEM Admin. Code R. 335-3-1403
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.335-3-1106
16.	Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lb/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R.335-3-1106
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.335-3-1106
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. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105

Fed	erally Enforceable Provisos	Regulations
2.	Method 5 or 17 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
4.	Method 6 or 6C as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of sulfur dioxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
5.	Method 10 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of carbon monoxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
6.	Method 7 or 7E as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of nitrogen oxides emissions from the stack.	ADEM Admin. Code R. 335-3-105
7.	Method 25A as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of volatile organic compounds emissions from the stack.	ADEM Admin. Code R. 335-3-105
<u>4 -</u>	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 Part 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
3.	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. 335-3-1106
4.	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. 335-3-1106
5.	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. 335-3-1106
6.	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. 335-3-1106

Federally Enforceable Provisos		Regulations
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. 335-3-104
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. 335-3-1106
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. 335-3-104
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. 335-3-104
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. 335-3-104
12.	The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
<u>5 -</u>	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. 335-3-104
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 PM $_{10}$ 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. A. lb PM/MMBTU input and B. lb PM $_{10}$ /MMBTU input.	ADEM Admin. Code R. 335-3-104
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 = $\{(1201.95 \text{ BTU/lb at } 275 \text{ psi}) \text{ x (lb of steam generated (from recorder))}\} / \{0.68 \text{ (boiler efficiency)}\}$ The lowest steam flow-rate in a particular hour shall be the steam flowrate used for that particular hour in the above calculation.	ADEM Admin. Code R. 335-3-104

Fed	erally Enforceable Provisos	Regulations
4.	Consecutive rolling 12-month PM and PM_{10} emissions for these boilers shall be determined by summing daily PM and PM_{10} emissions, which shall be calculated using the following formulas: A. PM (lb/day) = (PM lb/ MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3) B. PM_{10} (lb/day) = (PM10 lb/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.	ADEM Admin. Code R. 335-3-104
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 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. 335-3-104
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.	ADEM Admin. Code R. 335-3-104
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. 335-3-1002
8.	A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-1106

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: WET BIOMASS

Secondary: NONE

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	20.53 LB/HR	SYNTHETIC MINOR PSD
	1,100 PPM @ 3% O2	40 CFR, Part 63, Subpart 5-D
NOx	14.75 LB/HR OR 0.50	BACT-PSD
	LB/MMBTU	
Particulate	24.9 TONS/YR	SYNTHETIC MINOR PSD
PM_{10}	14.9 TONS/YR	SYNTHETIC MINOR PSD
Filterable PM	0.043 lb/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
	Recordkeeping	NSPS D _C
Opacity	20% as determined by a 6-minute	SIP
	average	
	10% without Wet Scrubber	40 CFR, Part 63, Subpart 5-D
SO_2	Less than 5 µg/m3/hr	SYNTHETIC MINOR PSD
HYDROGEN	0.022 LB/MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
CHLORIDE (HCL)	INPUT	
MERCURY (HG)	5.7E-06 MMBTU OF HEAT	40 CFR, Part 63, Subpart 5-D
	INPUT	

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
3.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a SO ₂ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
5.	This unit is subject to a NO _x PSD-BACT emission limitation.	ADEM Admin. Code R. 335-3-1403
6.	This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
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 $D_{\rm c}$.	ADEM Admin. Code R. 335-3-1002
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. 335-3-1106
<u>2 -</u>	Emission Standards	
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. 335-3-401
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. 335-3-1403
3.	The particulate emission rate shall not exceed $0.17~\rm gr/dscf$ adjusted to $50\%~\rm excess$ 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. 335-3-408
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. 335-3-1403
5.	CO emission concentrations shall not exceed $\frac{1,100}{1,100}$ ppm @ 3% O ₂ (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
6.	Emissions of CO from this wood gasification boiler shall not exceed $20.53\ lb$ /hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10.	ADEM Admin. Code R. 335-3-1403

Fed	erally Enforceable Provisos	Regulations
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. 335-3-1403
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. 335-3-1403
9.	Emissions of PM shall not exceed 0.039 lb/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1403
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: 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.	ADEM Admin. Code R. 335-3-1403
12.	Emissions of NOx from this wood gasification boiler shall not exceed 14.750 lb /hr or 0.500 lb /MMBtu of heat input as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.	ADEM Admin. Code R. 335-3-1403
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. 335-3-1106
14.	Emissions of Hydrogen Chloride (HCl) shall not exceed 0.022 lb/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1106
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. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 17 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
4.	Method 6 or 6C as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of sulfur dioxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
5.	Method 10 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of carbon monoxide emissions from the stack.	ADEM Admin. Code R. 335-3-105

Fed	erally Enforceable Provisos	Regulations
6.	Method 7 or 7E as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of nitrogen oxides emissions from the stack.	ADEM Admin. Code R. 335-3-105
<u>4 -</u>	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 Part 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1106
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. 335-3-1106
5.	Install and operate Continuous Operating Monitoring System (40 CFR Part 63, Subpart 5-D, Table 8). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1106
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. 335-3-1106
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. 335-3-104
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. 335-3-104
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. 335-3-104

Fed	erally Enforceable Provisos	Regulations
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 Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
<u>5 -</u>	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.	
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 PM $_{10}$ 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. A. lb PM/MMBTU input and B. lb PM $_{10}$ /MMBTU input.	ADEM Admin. Code R. 335-3-104
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 = $\{(1201.95 \text{ BTU/lb at } 275 \text{ psi}) \text{ x (lb of steam generated (from recorder))}\}$ $\{0.68 \text{ (boiler efficiency)}\}$ The lowest steam flow-rate in a particular hour shall be the steam flowrate used for that particular hour in the above calculation.	
4.	Consecutive rolling 12-month PM and PM_{10} emissions for these boilers shall be determined by summing daily PM and PM_{10} emissions, which shall be calculated using the following formulas: A. PM (lb/day) = (PM lb/ MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3) B. PM_{10} (lb/day) = (PM10 lb/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.	
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 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. 335-3-104
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.	

Federally Enforceable Provisos		Regulations
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.	
8.	A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	
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.	
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.	

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 Application:

Description:

No. 4 Power Boiler

15.0 MMBtu/hr Wood Waste Gasification Boiler with

Multiclone and ESP Control Device

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: WET BIOMASS

Secondary: NONE

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	22.60 LB/HR	SYNTHETIC MINOR PSD
	1,100 PPM @ 3% O2	40 CFR, Part 63, Subpart 5-D
NO_X	8.90 LB/HR	SYNTHETIC MINOR PSD
Particulate	2.96 LB/HR	SYNTHETIC MINOR PSD
PM_{10}	1.58 LB/HR	SYNTHETIC MINOR PSD
Filterable PM	0.043 lb/MMBtu of steam output	40 CFR, Part 63, Subpart 5-D
SO_2	Less than 5 μg/m3/hr or 8.9 lb/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 LB/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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
3.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a NO _x PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
5.	This unit is subject to a SO ₂ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
6.	This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
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. 335-3-1106
<u>2 -</u>	Emission Standards	
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. 335-3-401
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. 335-3-1403
3.	The particulate emission rate shall not exceed 0.17 gr/dscf 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. 335-3-1408
4.	Emissions of CO from this wood gasification boiler shall not exceed $22.60\ lb$ /hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10.	ADEM Admin. Code R. 335-3-1403
5.	CO emission concentrations shall not exceed 1,100 ppm @3% O_2 (40 CFR, Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
6.	Emissions of particulate matter from this wood gasification boiler shall not exceed 2.96 lb /hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
7.	Emissions of particulate matter equal to or less than 10 microns from this wood gasification boiler shall not exceed 1.58 lb /hr. as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403
8.	Emissions of Filterable PM shall not exceed 0.043 lb/MMBtu, 3-run average (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106

Fed	erally Enforceable Provisos	Regulations
9.	Emissions of NOx from this wood gasification boiler shall not exceed 8.90 lb /hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.	ADEM Admin. Code R. 335-3-1403
10.	Emissions of Hg shall not exceed 5.7E ⁻⁰⁶ lb/MMBtu of heat input (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
11.	Emissions of HCl shall not exceed 0.022 lb/MMBtu (40 CFR Part 63, Subpart 5-D, Table 2). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106
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. 335-3-1106
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. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 17 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
3.	Method 201 or 201A as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate matter equal to or less than 10 microns emissions from the stack.	ADEM Admin. Code R. 335-3-105
4.	Method 6 or 6C as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of sulfur dioxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
5.	Method 10 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of carbon monoxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
6.	Method 7 or 7E as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of nitrogen oxides emissions from the stack.	ADEM Admin. Code R. 335-3-105
<u>4 -</u>	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 Part 63, Subpart 5-D, Tables 5, 6 and 8). The compliance date is January 31, 2016.	ADEM Admin. Code R. 335-3-1106

Fed	erally Enforceable Provisos	Regulations
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. 335-3-1106
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. 335-3-1106
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. 335-3-1106
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. 335-3-1106
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. 335-3-104
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. 335-3-1106
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. 335-3-104
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. 335-3-104
11.	The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
<u>5 -</u>	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 PM $_{10}$ 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. A. lb PM/MMBTU input and B. lb PM $_{10}$ /MMBTU input.	ADEM Admin. Code R. 335-3-104
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: BTU input = $\{(1201.95 \text{ BTU/lb at } 275 \text{ psi}) \text{ x (lb of steam generated (from recorder))}\} / \{0.68 \text{ (boiler efficiency)}\}$ The lowest steam flow-rate in a particular hour shall be the steam flowrate used for that particular hour in the above calculation.	ADEM Admin. Code R. 335-3-104

Federally Enforceable Provisos		Regulations
3.	Consecutive rolling 12-month PM and PM_{10} emissions for these boilers shall be determined by summing daily PM and PM_{10} emissions, which shall be calculated using the following formulas: A. PM (lb/day) = (PM lb/ MMBTU input factor established in Proviso No. 5.2) x (BTU input established in Proviso No. 5.3) B. PM_{10} (lb/day) = (PM10 lb/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.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-104
6.	A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
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. 335-3-1106

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 Application:

No. 5 Power Boiler

Description:

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

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: NATURAL GAS

Secondary: NONE

Pollutant	Regulatory Emission Limit	Applicable Standard
CO	0.50 LB/HR	SYNTHETIC MINOR PSD
NO_X	2.0 LB/HR	SYNTHETIC MINOR PSD
Particulate	0.12 LB/HR	SYNTHETIC MINOR PSD
PM_{10}	0.07 LB/HR	SYNTHETIC MINOR PSD
	Recordkeeping	NSPS
Opacity	20% as determined by a 6-minute	SIP
	average	

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
3.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a NO _x PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
5.	This unit is subject to a CO PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-501
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 $D_{\rm c}$.	ADEM Admin. Code R. 335-3-1403
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. 335-3-1106
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This boiler shall be restricted to burning natural gas for fuel, with no permitted backup fuel.	ADEM Admin. Code R. 335-3-1403
3.	The particulate emission rate shall not exceed 0.17 gr/dscf 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. 335-3-408
4.	Emissions of CO from this natural gas fired boiler shall not exceed 0.5 lb/hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 10.	ADEM Admin. Code R. 335-3-1403
5.	Emissions of particulate matter from this natural gas fired boiler shall not exceed 0.12 lb/hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
6.	Emissions of particulate matter equal to or less than 10 microns from this natural gas fired boiler shall not exceed $0.07~\rm lb$ /hr. as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403
7.	Emissions of NOx from this natural gas fired boiler shall not exceed $2.0\ lb$ /hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.	ADEM Admin. Code R. 335-3-1403

Federally Enforceable Provisos		Regulations
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. 335-3-1002
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 17 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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 emissions from the stack.	ADEM Admin. Code R. 335-3-105
4.	Method 6 or 6C as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of sulfur dioxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
5.	Method 10 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of carbon monoxide emissions from the stack.	ADEM Admin. Code R. 335-3-105
6.	Method 7 or 7E as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of nitrogen oxides emissions from the stack.	ADEM Admin. Code R. 335-3-105
<u>4 -</u>	Emission Monitoring	
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. 335-3-104
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.	
3.	The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	ADEM Admin. Code R. 335-3-104
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. 335-3-104
<u>5 -</u>	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.	

Federally Enforceable Provisos	Regulations
2. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	104

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: None Secondary: None

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

Federally Enforceable Provisos	Regulations
1 – Applicability	
1. These units are subject to the loading and storage of VOC limits.	ADEM Admin. Code R. 335-3-603
2 - Emission Standards	
1. These units shall have installed and operate one of the control options listed in ADEM Admin. Code R. 335-3-603 (2)	ADEM Admin. Code R. 335-3-603 (2)
3 - Compliance and Performance Test Methods and Procedures	
1. These units are subject to the general provisos only.	
4 - Emission Monitoring	
1. The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.	
5 - Recordkeeping and Reporting Requirements	
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.	

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: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: NONE Secondary: NONE

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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
3.	Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lb /hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
4.	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 lb/hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
<u>4 -</u>	Emission Monitoring	
1.	While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated.	ADEM Admin. Code R. 335-3-104
	The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the	

Federally Enforceable Provisos	Regulations
inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection.	
5 - Recordkeeping and Reporting Requirements	
1. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	

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: $24\frac{hr}{day} \times 7\frac{day}{week} \times 52\frac{week}{yr} = 8,760\frac{hr}{year}$

Type and quantity of fuel used:

Primary: STEAM FROM BOILERS

Secondary:

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

Federally Enforceable Provisos	Regulations	
1 – Applicability		
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "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. 335-3-1404	
2 - Emission Standards		
1. Emissions 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.		
3 - Compliance and Performance Test Methods and Procedures		
1. Method 25A as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of volatile organic compounds emissions from the stack.	ADEM Admin. Code R. 335-3-105	
4 - Emission Monitoring		
1. The monitoring requirements in this permit shall be as required in Recordkeeping and Reporting Requirements.		
5 - Recordkeeping and Reporting Requirements		
 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: 		
(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.		

Emission Unit No. 034 (SAWMILL OPERATIONS) Operating Permit Summary No. 034

Emission Unit(s):

Sawmill Operations, Unit 034

Designation No(s). in Application:

Sawmill No. 34

Description:

Saws, Screen, Hogger, Hopper, and Silo

Permitted Operating Schedule: $24\frac{hr}{day} \times 7\frac{day}{week} \times 52\frac{week}{yr} = 8,760\frac{hr}{year}$

Type and quantity of fuel used:

Primary: Secondary:

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

Fed	erally Enforceable Provisos	Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
3.	Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lb/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
4.	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 lb /hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403
<u>3 -</u>	Compliance and Performance Test Methods and Procedures	
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
4 - Emission Monitoring		
1.	While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated.	ADEM Admin. Code R. 335-3-104

Federally Enforceable Provisos	Regulations
The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection.	
5 - Recordkeeping and Reporting Requirements	
1. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	

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: $24\frac{hr}{day} \times 7\frac{day}{week} \times 52\frac{week}{yr} = 8,760\frac{hr}{year}$

Type and quantity of fuel used:

Primary: Secondary:

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

Federally Enforceable Provisos	Regulations
1 – Applicability	
1. This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2. This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3. This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-404
4. This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-404
2 - Emission Standards	
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. 335-3-401
2. This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
3. Emissions of particulate matter from all facility baghouses excluding Units 037 and 040 shall not exceed 2.60 lb/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
4. 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 lb/hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	
3 – Compliance and Performance Test Methods and Procedures	
1. Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2. Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
4 - Emission Monitoring	
1. While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated.	ADEM Admin. Code R. 335-3-104

Federally Enforceable Provisos	Regulations
The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection.	
5 - Recordkeeping and Reporting Requirements	
1. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	104

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:

Description:

Panel Saw Operations No. 37

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

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: Secondary:

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

Fod	Federally Enforceable Provisos Regulations		
	<u> </u>	Regulations	
<u> </u>	Applicability This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-	
		3-401	
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404	
3.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403	
4.	This unit is subject to a PM ₁₀ PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403	
<u>2 -</u>	Emission Standards		
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. 335-3-401	
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404	
3.	Emissions of particulate matter from this Unit shall not exceed 3.12 lb/hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403	
4.	Emissions of particulate matter equal to or less than 10 microns from this Unit shall not exceed 3.12 lb /hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.		
<u>3 -</u>	Compliance and Performance Test Methods and Procedures		
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105	
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105	
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. 335-3-105	
<u>4 -</u>	Emission Monitoring		
1.	While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated.	ADEM Admin. Code R. 335-3-104	
	The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection.		

Federally Enforceable Provisos	Regulations
5 - Recordkeeping and Reporting Requirements	
1. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	3-104

Emission Unit No. 038 (Lumber Planing and Cutting Line with Baghouse No. 13) Operating Permit Summary No. 038

Emission Unit(s):

Lumber Planing and Cutting Line with One Baghouse,

Unit 037

Designation No(s). in Application:

Description:

Lumber Planing and Cutting Line No. 1 with Baghouse

Planer, Saws, and Baghouse No. 13

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: Secondary:

Pollutant	Regulatory Emission Limit	Applicable Standard
Opacity	20% as determined by a 6-minute average	SIP
PM	2.5 LB/HR	SYNTHETIC MINOR PSD
PM ₁₀	1.5 LB/HR	SYNTHETIC MINOR PSD
PM _{2.5}	1.0 LB/HR	SYNTHETIC MINOR PSD
Particulates	$E = 3.59(P^{0.62})$	SIP

Fad	Federally Enforceable Provisos Regulations		
		Acguiadons	
<u>1 -</u>	Applicability		
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401	
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404	
3.	This unit is subject to a PM PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403	
4.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403	
5.	This unit is subject to a PM _{2.5} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403	
<u>2 -</u>	Emission Standards		
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. 335-3-401	
2.	Emissions of PM from Baghouse No. 13 shall not exceed 2.5 lb/hr as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403	
3.	Emissions of PM_{10} from Baghouse No. 13 shall not exceed 1.5 lb/hr as measured in accordance with 40 CFR Part 50, Appendix A, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403	
4.	Emissions of $PM_{2.5}$ from Baghouse No. 13 shall not exceed 1.0 lb/hr as measured in accordance with 40 CFR Part 50, Appendix A, Method 201A.	ADEM Admin. Code R. 335-3-1403	
5.	This Unit shall not discharge into the atmosphere particulate matter in and one hour in excess of $E=3.59(P^{0.62})$. Where E is the particulate emissions in lb/hr and P is the process weight in tons/hr.	ADEM Admin. Code R. 335-3-404	
6.	This Unit shall exhaust to the baghouse when operating. If this Unit's exhaust bypasses the baghouse the PM emissions must be calculated and reported as if there was 0% capture and control.	ADEM Admin. Code R. 335-3-404	
<u>3 -</u>	Compliance and Performance Test Methods and Procedures		
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105	
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105	
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. 335-3-105	

Federally Enforceable Provisos	Regulations
4 - Emission Monitoring	
1. While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated. The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the	3-104
 inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection. 5 - Recordkeeping and Reporting Requirements 	
	ADDA A 1 : G 1 D 225
 A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request. 	3-104

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:

Description:

Re-Saw Operations No. 40

Saws, Cyclone No. 6 and Baghouse No. 10

Permitted Operating Schedule: $24 \frac{hr}{day} \times 7 \frac{day}{week} \times 52 \frac{week}{yr} = 8,760 \frac{hr}{year}$

Type and quantity of fuel used:

Primary: None Secondary: None

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

Federally Enforceable Provisos		Regulations
1 -	Applicability	
1.	This unit is subject to the SIP opacity emission rate limits.	ADEM Admin. Code R. 335-3-401
2.	This unit is subject to the particulate emission rate limits for Process Industries - General sources.	ADEM Admin. Code R. 335-3-404
3.	This unit is subject to a particulate PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
4.	This unit is subject to a PM_{10} PSD-Synthetic Minor emission limitation.	ADEM Admin. Code R. 335-3-1403
<u>2 -</u>	Emission Standards	
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. 335-3-401
2.	This unit shall not discharge into the atmosphere particulate matter in any one hour in excess of General Permit Proviso 31.	ADEM Admin. Code R. 335-3-404
3.	Emissions of particulate matter from this Unit shall not exceed $3.3\ lb$ /hr total as measured in accordance with 40 CFR Part 60, Appendix A, Method 5 or 17.	ADEM Admin. Code R. 335-3-1403
4.	Emissions of particulate matter equal to or less than 10 microns from this Unit shall not exceed 3.3 lb /hr total as measured in accordance with 40 CFR Part 50, Appendix M, Method 201 or 201A.	ADEM Admin. Code R. 335-3-1403
3 - Compliance and Performance Test Methods and Procedures		
1.	Method 9 as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of the opacity of the stack emissions.	ADEM Admin. Code R. 335-3-105
2.	Method 5 or 5a as defined in Appendix A to 40 CFR Part 60 shall be used in the determination of particulate emissions from the stack.	ADEM Admin. Code R. 335-3-105
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. 335-3-105
4 - Emission Monitoring		
1.	While the process is operating, someone familiar with the process shall perform an instantaneous visible emissions check of the baghouse at least once per week/daily during daylight hours. If visible emissions are observed, the facility shall initiate corrective action as soon as practicable, but no longer than 24 hours from the time of observation of the visible emissions, and an additional instantaneous visible emissions check shall be performed after corrective action is complete to ensure that the visible emissions have been eliminated.	ADEM Admin. Code R. 335-3-104
	The baghouse(s) and filter(s) shall be inspected every 12 months, but more frequently when visible emissions have been observed. If the results of the inspection indicate that cleaning, maintenance, or replacement is needed, such action shall be completed within 24 hours of completing the inspection.	

Federally Enforceable Provisos	Regulations
5 - Recordkeeping and Reporting Requirements	
1. A logbook of the visible emissions required in the Emission Monitoring section shall be maintained, including the date, time, and results of each observation, the date, time, and results of any physical inspections performed, and the date and time of any cleaning, maintenance, or replacement. The logbook shall be retained for at least five years and available for inspection upon request.	104