



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Beverly Eaves Purdue  
Governor

Sheila Holman  
Director

Dee Freeman  
Secretary

**ENTER DATE**

Mr. James Reavis  
Plant Manager - Roaring River Hardboard  
Louisiana Pacific Corporation  
Post Office Box 98  
Roaring River, North Carolina 28669

Dear Mr. Reavis:

**SUBJECT:** Air Quality Permit No. 03909T48  
Facility ID: 9700001  
Louisiana Pacific Corporation  
Roaring River, North Carolina  
Wilkes County  
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for a significant modification of a Title V permit received August 30, 2011, we are forwarding herewith Air Quality Permit No. 03909T48 to Louisiana Pacific Corporation, Highway 268 Roaring River, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written

**Permitting Section**

1641 Mail Service Center, Raleigh, North Carolina 27699-1641  
2728 Capital Blvd., Raleigh, North Carolina 27604  
Phone: 919-715-6235 / FAX 919-733-5317 / Internet: [www.ncair.org](http://www.ncair.org)

One  
North Carolina  
*Naturally*

Mr. Reavis

**ENTER DATE**

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petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

This Air Quality Permit shall be effective from **ENTER DATE** until October 31, 2013\*, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Ms. Fern Paterson, P.E. at (919) 715-6242.

Sincerely yours,

Donald R. van der Vaart, Ph.D., J.D., P.E.  
Chief

Enclosure

cc: Gregg Worley, USEPA Region IV  
Winston-Salem Regional Office  
Central Files

\* This permit shall expire on the earlier of October 31, 2013 or the renewal of permit 03909T45 has been issued or denied.

## Summary of Changes to Permit

The following changes were made to the Louisiana Pacific - Roaring River Plant Air Permit No. 03909T47

Page(s)	Section	Description of Change(s)
1	Permit Cover Page	Amend permit revision numbers and issuance/effective dates.
21	Section 2.1.E, Table	Revise the listed CO emissions limitation for biomass firing at Boiler Nos. 2 and 3 ( <b>ID Nos. ES-B2 and ES-B3</b> ) from 508 ppmv at 7% O <sub>2</sub> to 2,718 ppmv at 7% O <sub>2</sub> .
27	Section 2.1.E.11.c.iv.	Revise the listed CO emissions limitation for biomass firing at Boiler Nos. 2 and 3 ( <b>ID Nos. ES-B2 and ES-B3</b> ) from 508 ppmv at 7% O <sub>2</sub> to 2,718 ppmv at 7% O <sub>2</sub> .
44-52	Section 3	Update General Provisions with the most recent revision (v. 3.5)

### Insignificant Activities pursuant to 15A NCAC 2Q .0503(8)

Emission Source I.D.	Emission Source Description
IES-G1, IES-G2, IES-G3, and IES-G4	Four gasoline-fired generators; 5,000, 5,000, 400, and 5,000 watt capacity, respectively.
IES-FT	Two No. 6 fuel oil storage tanks; 100,000 gallons and 400,000 gallons capacity.
IES-FP1 and IES-FP2	Two diesel emergency back-up fire pumps; 160 HP and 215 HP, respectively
IES-LP IT-9 and IES-LP IT-10	Two bulk storage tanks (10,000 gallons each) for water-based paint
IES-LP IT-1	Diesel Fuel Tank
IES-LP IT-2	Diesel Fuel Tank
IES-LP IT-3	Kerosene Tank
IES-LP IT-4	Gasoline Tank
IES-LP IT-5	Used Oil Tank
IES-LP IT-6	Diesel Fuel Tank
IES-LP IT-7	Linseed Oil Tank
IES-LP IT-8	Glue Tank
IES-LP IT-11	Latex Edge Sealer Tank
IES-LP IT-12	Fibertite Tank
IES-LP IT-13	Compregnite Tank
IES-LP IT-14	Compregnite Tank
IES-LP IT-15	Resin Tank
IES-LP IT-16	Resin Tank
IES-LP IT-17	Line 1 Broke Chest
IES-LP IT-18	Line 2 Broke Chest
IES-LP IT-19	Scrubber Recycled White Water Tank
IES-LP IT-20	Hydraulic Oil Tank; Maintenance Shop DTE 26
IES-LP IT-21	Hydraulic Oil Tank; Maintenance Shop 629
IES-LP IT-22	Hydraulic Oil Tank; Maintenance Shop DTE 25
IES-LP IT-23	Hydraulic Oil Tank; Vehicle Maintenance Shop
IES-LP IT-24	Compregnite Day Tank
IES-LP IT-39	Propane Tank
IES-LP IT-40	Propane Tank
IES-LP IT-41	Propane Tank
IES-LP IT-42	Propane Tank
IES-LP IT-43	Propane Tank
IES-LP IT-44	Line 1 Vorjects Chest
IES-LP IT-45	Line 1 Washed Stock Chest
IES-LP IT-46	Line 1 Washer WW Chest
IES-LP IT-47	Line 1 Refiner WW Chest
IES-LP IT-48	Line 1 Dust Chest #1
IES-LP IT-49	Line 1 Dust Chest #2
IES-LP IT-50	Line 1 WW Surge Chest
IES-LP IT-51	Line 1 Repulper Chest
IES-LP IT-52	Line 1 Lean White Water Chest
IES-LP IT-53	Line 1 Rich White Water Chest
IES-LP IT-54	Line 1 Slush Overlay Primary Chest
IES-LP IT-55	Line 1 Chemical Mix Chest
IES-LP IT-56	Line 1 Slush Overlay Machine Chest
IES-LP IT-57	Line 1 Machine Chest
IES-LP IT-58	Line 1 Chip Washer Tank
IES-LP IT-59	Line 1 Saveall Chest
IES-LP IT-60	Line 1 Seal Pit
IES-LP IT-61	Line 1 Deculator Seal Pit
IES-LP IT-62	Line 2 Vorjects Chest
IES-LP IT-63	Line 2 Washed Stock Chest

<b>Emission Source I.D.</b>	<b>Emission Source Description</b>
IES-LP IT-64	Line 2 Washer WW Chest
IES-LP IT-65	Line 2 Refiner WW Chest
IES-LP IT-66	Line 2 Dust Chest #1
IES-LP IT-67	Line 2 Dust Chest #2
IES-LP IT-68	Line 2 WW Surge Chest
IES-LP IT-69	Line 2 Repulper Chest
IES-LP IT-70	Line 2 Lean White Water Chest
IES-LP IT-71	Line 2 Rich White Water Chest
IES-LP IT-72	Line 2 Slush Overlay Primary Chest
IES-LP IT-73	Line 2 Chemical Mix Chest
IES-LP IT-74	Line 2 Slush Overlay Machine Chest
IES-LP IT-75	Line 2 Machine Chest
IES-LP IT-76	Line 2 Chip Washer Tank
IES-LP IT-77	Line 2 Saveall Chest
IES-LP IT-78	Line 2 Seal Pit
IES-LP IT-79	Line 2 Deculator Seal Pit
IES-FT1	No. 6 fuel oil tank; 20,000 gallons
IES-FT2	No. 6 fuel oil tank; 20,000 gallons
IES-SW	Stock Washing Operations
IES-CT	Cooling Tower

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100, "Control of Toxic Air Pollutants," or 15A NCAC 2Q .0711, "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of GACT see the DAQ page titled, "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities." The link to this site is as follows: <http://daq.state.nc.us/permits/insig/>

State of North Carolina,  
Department of Environment,  
and Natural Resources  
Division of Air Quality



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03909T48	03909T47	ENTER DATE	November 30, 2008*

\*This permit shall expire on the earlier of October 31, 2013 or the renewal of permit 03909T45 has been issued or denied.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee:** Louisiana Pacific Corporation  
**Facility ID:** 9700001

**Facility Site Location:** Highway 268  
**City, County, State, Zip:** Roaring River, Wilkes County, North Carolina, 28669

**Mailing Address:** Post Office Box 98  
**City, State, Zip:** Roaring River, North Carolina, 28669

**Application Number:** 9700001.11A  
**Complete Application Date:** August 30, 2011

**Primary SIC Code:** 2493  
**Division of Air Quality,  
Regional Office Address:** Winston-Salem Regional Office  
585 Waughtown Street  
Winston-Salem, North Carolina, 27107

Permit issued this the ENTER DATE, 2011

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Donald R. van der Vaart, Ph.D., J.D., P.E., Chief, Air Permits Section  
By Authority of the Environmental Management Commission

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(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

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ATTACHMENT

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## SECTION 1 - PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Wood Yard Area</b>			
ES-FS1	Fuel wood system	CD-FS-1	bagfilter (2,370 sq. ft. of filter area)
ES-RC2	No. 2 reclaim rechipper	CD-RC2-A	cyclone (72 inches in diameter)
ES-PRS	Pneumatic rock separator	CD-WC4	cyclone (108 inches in diameter)
<b>Woodwaste Collection and Transfer Systems</b>			
ES-1A/1B	Woodworking equipment consisting of sawing and scoring equipment	BH1A/1B	Two parallel bagfilters; 3,702 sq. ft. of filter area (total for both)
ES-2A	Woodworking equipment consisting of the Newman station, and scoring, sawing, and sanding equipment	BH2A*	fabric filter; 3,993 sq. ft. of filter area
ES-2B	Woodworking equipment consisting of a shake machine, Weima grinder, and scoring equipment	BH2B*	fabric filter; 3,993 sq. ft. of filter area
ES-3	Woodworking equipment consisting of lap line sanding, the ripper machine, and the fixed knife waste chopper	BH3	fabric filter; 3,678 sq. ft. of filter area
ES-4	Woodworking equipment consisting of the panel line sanding unit, the Newman sanding station, the Newman machine, and the glue line sanding unit	BH4	fabric filter; 6,921 sq. ft. of filter area
ES-5	Pneumatic woodwaste transfer system No. 5	BH5	fabric filter; 1,232 sq. ft. of filter area
<b>Thermomechanical Pulping Systems</b>			
ES-L1D1 <sup>(CG)</sup> MACT DDDD	Line 1, digester 1	***CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 125 gallon per minute.
ES-L1D2 <sup>(CG)</sup> MACT DDDD	Line 1, digester 2	***CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 125 gallon per minute.
ES-L1R1 through ES-L1R4 MACT DDDD	Line 1, four refiners	N/A	N/A

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ES-L2D1 <sup>(CG)</sup> MACT DDDD	Line 2, digester 1	***CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 125 gallon per minute.
ES-L2D2 <sup>(CG)</sup> MACT DDDD	Line 2, digester 2	***CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 125 gallon per minute.
ES-L2R1 through ES-L2R4 MACT DDDD	Line 2, four refiners	N/A	N/A
<b>Hardboard Manufacturing Equipment Lines</b> <b>(273.5 million square feet (MMSF) of board on a 1/2" thickness basis per year throughput capacity)</b>			
ES-L1P <sup>(DG)</sup> MACT DDDD	Line 1 press with unloader (40,520 square feet board per hour throughput combined capacity for ES-L1P and ES-L2P)	N/A	N/A
ES-L1BO <sup>(DG)(PG)</sup> MACT DDDD	Line 1 steam-heated bake oven	***ES-B3 - For control of zones 3 through 7	Biomass/No. 6 fuel oil/natural gas-fired boiler (183 million Btu per hour rated capacity)
ES-L1BC MACT DDDD	Line 1 board cooler	N/A	N/A
ES-L1CH MACT DDDD	Line 1 compregnite hood	N/A	N/A
ES-L1LVP MACT DDDD	Line 1 large vacuum pump	N/A	N/A
ES-L1HDP MACT DDDD	Line 1 high density pump	N/A	N/A
ES-L1H MACT DDDD	Line 1 humidifiers	N/A	N/A
ES-L1IH MACT DDDD	Line 1 inspection hood	N/A	N/A
ES-L1SVP MACT DDDD	Line 1 small vacuum pump	N/A	N/A
ES-L2P <sup>(DG)</sup> MACT DDDD	Line 2 press with unloader (40,520 square feet board per hour throughput combined capacity for ES-L1P and ES-L2P)	N/A	N/A
ES-L2BO <sup>(DG)(PG)</sup> MACT DDDD	Line 2 steam-heated bake oven	***ES-B3 - For control of zones 3 through 7	Biomass/No. 6 fuel oil/natural gas-fired boiler (183 million Btu per hour rated capacity)
ES-L2BC MACT DDDD	Line 2 board cooler	N/A	N/A

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ES-L2CH MACT DDDD	Line 2 compregnite hood	N/A	N/A
ES-L2LVP MACT DDDD	Line 2 large vacuum pump	N/A	N/A
ES-L2HDP MACT DDDD	Line 2 high density pump	N/A	N/A
ES-L2H MACT DDDD	Line 2 humidifiers	N/A	N/A
ES-L2IH MACT DDDD	Line 2 inspection hood	N/A	N/A
ES-L2SVP MACT DDDD	Line 2 small vacuum pump	N/A	N/A
ES-MBH MACT DDDD	Line 1 and Line 2 Mechanical Board Humidifiers	N/A	N/A
<b>Trimboard Manufacturing</b>			
ES-TB-1 MACT QQQQ	Trimboard line with cold press (16,000 square feet per hour throughput capacity)	N/A	N/A
<b>Finishing Lines</b>			
ES-LL MACT QQQQ	Lap coating line (56,000 square feet board per hour throughput capacity) consisting of a sander, three edge coat spray booths, a roll coat booth, and seven gas and electric IR dry and cure ovens	N/A	N/A
ES-PL MACT QQQQ	Panel coating line (50,600 square feet board per hour throughput capacity) consisting of a sanding booth, two roll coaters, a curtain coater, three IR dryer/ovens and six gas dry and cure ovens	N/A	N/A
ES-PF MACT QQQQ	Pre-finish coating line (10,914 square feet board per hour throughput capacity) consisting of a sanding booth, two roll coating booths, two curtain coaters, two edge seal coaters and ten drying and curing ovens	N/A	N/A
ES-SB MACT QQQQ	Propane-fired bake oven (0.5 million Btu per hour heat input capacity)	NA	N/A
ES-SM MACT QQQQ	Groove sealer spray booth	N/A	N/A
ES-SE MACT DDDD	Shake edge seal spray booth	N/A	N/A
<b>Steam Production</b>			
ES-B1 CASE-BY-CASE MACT	No. 6 fuel oil/natural gas-fired boiler (44.4 million Btu per hour rated capacity)	N/A	N/A

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
ES-B2 CASE-BY-CASE MACT	Biomass/No. 6 fuel oil/natural gas-fired boiler (79 million Btu per hour rated capacity)	CD-1  CD-2	multi-cyclone (49, nine-inch diameter tubes) fan impingement type scrubber (106.4 gallons per minute water injection rate)
ES-B3~ PSD BACT FOR PM CASE-BY-CASE MACT	Biomass/No. 6 fuel oil/natural gas-fired boiler (183 million Btu per hour rated capacity) and associated over-fire air (OFA) / under grate air (UGA) low-NOx control equipment	CD-3  CD-4	multi-cyclone (176, nine-inch diameter tubes) wet venturi scrubber (700 gallons per minute caustic/water injection rate)
ES-B4T~ NSPS Dc CASE-BY-CASE MACT	Natural gas-fired temporary boiler (56.3 million Btu per hour nominal heat input rate) equipped with low-NOx burner	N/A	N/A
ES-B5T~ NSPS Dc CASE-BY-CASE MACT	Natural gas-fired temporary boiler (99 million Btu per hour nominal heat input rate) equipped with low-NOx burner	N/A	N/A
<b>Miscellaneous</b>			
ES-DGEN1 & ES-DGEN2** NSPS IIII	Two backup diesel-fired generators (each with a rating not to exceed 500 brake horsepower)	N/A	N/A
***ES-DGEN3 NSPS IIII	Temporary diesel-fired emergency generator (with a rating not to exceed 2521 brake horsepower or 1880 Kilowatt)	N/A	N/A
***ES-WWTP MACT DDDD	Waste water treatment plant	N/A	N/A

~ The boiler (ID No. **ES-B3**) is not permitted to operate concurrently, when boilers (ID Nos. **ES-B4T and ES-B5T**) are operating. Similarly, boilers (ID Nos. **ES-B4T and ES-B5T**) are not permitted to operate concurrently, when boiler (ID No. **ES-B3**) is operating.

\* These emission sources and control devices (ID No. **ES-L1BO, BH2A, and BH2B**) are listed as 502(b)(10) changes per 15A NCAC 2Q .0523. The bake oven may be modified to provide heating and air circulation to Zone B and to reduce the possibility of fiber buildup in the Zone A steam coil stack. The bagfilters may be modified to increase the total filter area for each to 3,993 square feet. The permit shield described in General Condition R does not apply.

\*\* These emission sources (ID Nos. **ES-DGEN1 and ES-DGEN2**) are listed as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

\*\*\* These emission source and control device (ID Nos. **ES-WWTP, ES-3, CD-TMP1 and ES-DGEN3**) are listed as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

(DG) - Debit generating sources for MACT DDDD.

(CG) - Credit generating sources for MACT DDDD.

(PG) - Partial credit generating sources for MACT DDDD.

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

**A. Fuel wood system (ID No. ES-FS1) with bagfilter (ID No. CD-FS1),  
No. 2 reclaim rechipper (ID No. ES-RC2) with simple cyclone (ID No. CD-RC2-A),  
Pneumatic rock separator (ID No. ES-PRS) with simple cyclone (ID No. CD-WC4)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	For P ≤ 30 tons per hour: $E = 4.10 * P^{0.67}$ For P > 30 tons per hour: $E = 55.0 * P^{0.11} - 40$ Where, E = allowable emissions rate (lb/hr) P = process weight rate (tons/hr)	15A NCAC 2D .0515
Visible emissions	ID Nos. ES-RC2 and ES-FS1: 40 percent opacity	15A NCAC 2D .0521(c)
	ID No. ES-PRS: 20 percent opacity	15A NCAC 2D .0521(d)

**1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from these sources (**ID Nos. ES-FS1, ES-RC2, and ES-PRS**) shall not exceed an allowable emission rate as calculated by the following equation:

$$\text{For } P \leq 30 \text{ tons per hour: } E = 4.10 * P^{0.67}$$

$$\text{For } P > 30 \text{ tons per hour: } E = 55.0 * P^{0.11} - 40$$

Where, E = allowable emission rate in pounds per hour  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. Particulate matter emissions from the fuel wood system (**ID No. ES-FS1**) shall be controlled by a bagfilter (**ID No. CD-FS1**). Particulate matter emissions from the No. 2 reclaim rechipper and pneumatic rock separator (**ID Nos. ES-RC2 and ES-PRS**) shall be controlled by simple cyclones (**ID Nos. CD-RC2 and CD-WC4**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
  - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the filters housing noting the structural integrity and the condition of the fabric filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork, bagfilter, and cyclones are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the bagfilter and cyclones; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilter and cyclones within 30 days of a written request by the DAQ. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the rock separator (**ID No. ES-PRS**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.
- b. Visible emissions from the reclaim rechipper and fuel wood system (**ID Nos. ES-RC2 and ES-FS1**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

**Testing** [15A NCAC 2Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a. (**ID No. ES-PRS**) or b. (**ID Nos. ES-RC2 and ES-FS1**) above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a. and b. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;

- ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**B. Manufacturing Line No. 1 including:**

- <sup>1</sup>Line 1 hardboard press with unloader (ID No. ES-L1P),
- <sup>1</sup>Line 1 steam heated bake oven (ID No. ES-L1BO), and
- <sup>1</sup>Line 1 board cooler (ID No. ES-L1BC).

**Manufacturing Line No. 2 including:**

- <sup>1</sup>Line 2 hardboard press with unloader (ID No. ES-L2P),
- <sup>1</sup>Line 2 steam heated bake oven (ID No. ES-L2BO), and
- <sup>1</sup>Line 2 board cooler (ID No. ES-L1BC).

**Thermomechanical Line No. 1 including:**

- digesters 1 and 2 (ID Nos. ES-L1D1 and ES-L1D2), and
- Line 1 refiners 1, 2, 3, and 4 (ID Nos. ES-L1R1, ES-L1R2, ES-L1R3, and ES-L1R4).

**Thermomechanical Line No. 2 including:**

- digesters 1 and 2 (ID Nos. ES-L2D1 and ES-L2D2), and
- Line 2 refiners 1, 2, 3, and 4 (ID Nos. ES-L2R1, ES-L2R2, ES-L2R3, and ES-L2R4).

The sources (ID Nos. ES-L1D1, ES-L1D2, ES-L2D1 and ES-L2D2) are controlled by a two stage countercurrent scrubber (ID No. CD-TMP1) with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 150 gallon per minute.

Zone 3 through 7 of the sources (ID Nos. ES-L1BO and ES-L2BO) are controlled by boiler No. 3 (ID No. ES-B3).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions <sup>1</sup>	Manufacturing Line No. 1 emission sources: 40 percent opacity	15A NCAC 2D .0521(c)
	Manufacturing Line No. 2 emission sources: 20 percent opacity	15A NCAC 2D .0521(d)
HAPs	National Emission Standards for Hazardous Air pollutants from Plywood and Composite Wood Products	15A NCAC 2D.1111 40 CFR 63, Subpart DDDD
Toxic air pollutants	<b>State Only Requirement</b> Facility wide source specific TAP emission rates established pursuant to Acceptable Ambient levels - see Section 2.2 A.2	15A NCAC 2D .1100

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	<b>State Only Requirement</b> Facility Wide Toxic Air pollutant Exemption Rates - see Section 2.2 A.3	15A NCAC 2Q .0711
Toxic air pollutants	<b>State Only Requirement</b> Last MACT TAP Assessment - see Section 2.2 A.4	15A NCAC 2Q .0705
Odor	<b>State Only Requirement</b> Odor control requirements - see Section 2.2 A.5	15A NCAC 2D .1806

<sup>1</sup>Opacity requirements apply to manufacturing lines only because there are no visible emissions anticipated from the thermomechanical pulping lines.

## 1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the Manufacturing line 2 (**ID Nos. ES-L2P, No. ES-L2BO, and ES-L1BC**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.
- b. Visible emissions from the Manufacturing line 1 (**ID Nos. ES-L1P, ES-L1BO, and ES-L1BC**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

### **Testing** [15A NCAC 2Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

### **Monitoring** [15A NCAC 2Q .0508(f)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.1.a. and b. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

### **Recordkeeping** [15A NCAC 2Q .0508(f)]

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .1111 [40 CFR 63, Subpart DDDD]: NESHAP for Plywood and Composite Wood Products Manufacture**

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDD by October 1, 2008. [40 CFR 63.2233(b)]

- a. Demonstration of compliance must be made no later than March 30, 2009. The Permittee shall submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in 40 CFR Part 63.7(b)(1). [40 CFR 63.2261(a)]
- b. The Permittee shall submit notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR Part 63.10(d)(2) and shall consist of:
  - i. compliance test results or other initial compliance demonstration, as appropriate, submitted to the DAQ regional office,
  - ii. a permit application submitted to the DAQ central office for the incorporation of all work practice standards, emission limits, and monitoring, recordkeeping, and reporting requirements to this permit, and
  - iii. the Permittee must develop and implement a plan for review and approval to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. This plan has to be submitted with the Notification of Compliance Status. [40 CFR 63.2268]

**Emissions Averaging Compliance Option**

- c. The Permittee shall comply with all applicable provisions of "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDD by emissions averaging compliance option. By using this option the Permittee shall demonstrate that emissions included in the emissions average meet the compliance options and operating requirements [40 CFR Sec. 63.2240(c)]

- (1) The Permittee shall calculate the required (RMR) and (AMR) actual mass removal for each semi-annual emissions averaging compliance period using the emission factors mentioned below and as per the equations below:

$$RMR = 0.90 \times \left( \sum_{i=1}^n UCEP_i \times OH_i \right) \quad (\text{Eq. 1})$$

$$AMR = \left( \sum_{i=1}^n CD_i \times OCEP_i \times OH_i \right) \quad (\text{Eq. 2})$$

$$AMR \geq RMR \quad (\text{Eq. 3})$$

Where:

RMR = required mass removal of total HAP from all debit generating sources (i.e., all process units that are either uncontrolled or undercontrolled, ID Nos. ES-L1P, ES-L2P, ES-L1BO, and ES-L2BO), pounds per semiannual period

AMR = actual mass removal of total HAP from all credit generating sources (i.e., all process units that are controlled as part of the Emissions Averaging Plan including credits from debit-generating process units that are under-controlled, ID Nos. ES-L1D1, ES-L1D2, ES-L2D1,

- ES-L2D2, ES-L1BO, and ES-L2BO), pounds per semiannual period;  
UCEPi = mass of total HAP from an uncontrolled or under-controlled process unit (i) that generates debits, pounds per hour;  
OHi = number of hours a process unit (i) is operated during the semiannual period, hours per 6-month period;  
CDi = control system efficiency for the emission point (i) for total HAP, expressed as a fraction, and not to exceed 90 percent, unitless (Note: To calculate the control system efficiency of biological treatment units that do not meet the definition of biofilter in Sec. 63.2292, the Permittee must use 40 CFR part 63, appendix C, Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit.);  
OCEPi = mass of total HAP from a process unit (i) that generates credits (including credits from debit-generating process units that are under-controlled), pounds per hour;  
0.90 = required control system efficiency of 90 percent multiplied, unitless. This will be 0.0 when the control devices are bypassed.

The list of Debit-generating sources, credit-generating sources, and partial credit-generating sources are listed below with their emission factors:

<b>Debit-generating sources</b>
Line 1 press and unloader: ES-L1P;
Line 2 press and unloader: ES-L2P
Line 1 steam-heated bake oven: ES-L1BO
Line 2 steam-heater bake oven: ES-L2BO
<b>Emission Factors:</b>
1) HAP emissions from the presses are 0.76 lb per bone dry ton (BDT) of product.
2) HAP emissions from unloaders are 0.085 lb per bone dry ton (BDT) of product.
3) HAP emissions from uncontrolled zone of the bake oven are 0.092 lb per bone dry ton (BDT) of product.
<b>Credit-generating sources</b>
Line 1, digester 1: ES-L1D1
Line 1, digester 2: ES-L1D2
Line 2, digester 1: ES-L2D1
Line 2, digester 2: ES-L2D2
<b>Emission Factors:</b>
1) The before control HAP emissions from the digester purge are 1.0 lb per bone dry ton (BDT) of product.
<b>Partial credit-generating sources</b>
Line 1 steam-heated bake oven: ES-L1BO
Line 2 steam-heated bake oven: ES-L2BO
<b>Emission Factors:</b>
1) The before control HAP emissions from the controlled zones <sup>Δ</sup> of the bake ovens are 1.0 lb per bone dry ton (BDT) of product.

- (2) The Permittee shall calculate debits and credits as specified in the following paragraphs:
- (i) limit process units in the emissions average to those process units located at the existing affected source.
  - (ii) The Permittee cannot use non operating process units to generate emissions averaging credits. The Permittee cannot use process units that are shut down to generate emissions averaging debits or credits.
  - (iii) The Permittee must not include emissions from the following time periods in your emissions averaging calculations:
    - (A) Emissions during periods of startup, shutdown, and malfunction as described in the startup, shutdown, and malfunction plan (SSMP).
    - (B) Emissions during periods of monitoring malfunctions, associated repairs, and required quality

<sup>Δ</sup> Zones 3 to 7

assurance or control activities or during periods of control device maintenance covered in your routine control device maintenance exemption. No credits may be assigned to credit-generating process units, and maximum debits must be assigned to debit-generating process units during these periods. [40 CFR 63.2240(c)(2)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the above calculations are not done with the correct emission factors as mentioned in the table above and if the semi-annual AMR is less than the semi-annual RMR.

#### **Operating Requirements**

- d. The Permittee must meet the operating requirements in Table 2 to this subpart for each process unit or control device used in calculation of emissions averaging credits.
- (i) The Permittee must petition DAQ for site-specific operating parameters to be established during the performance test and maintain the average operating parameters within the ranges established during the performance test. **OR**
  - (ii) The Permittee must maintain the 3-hour block average THC (Total Hydrocarbon) concentration in the exhaust of the control device below the maximum concentration established during the performance test;
  - (iii) The Permittee can change the emission factors or the efficiency referenced in this section administratively, by submission of an application. [Table 2 to Subpart DDDD]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Permittee fails to petition DAQ for establishing site-specific operating parameters in the permit within 60 days of the performance test and if the Permittee fails to maintain the operating parameters within the ranges established when the controls are being used to generate emissions credits.

#### **Work Practice Requirements**

- e. None.

#### **General Requirements**

- f. The Permittee must be in compliance with the compliance options at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption. The compliance options do not apply during times when the process units subject to the compliance options are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. The Permittee must also:
- (i) operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i), and
  - (ii) develop and implement a written SSMP according to the provisions in 40 CFR 63.6(e)(3). [40 CFR 63.2250]

#### **Reporting Requirements**

- g. (1) The Permittee must submit a semiannual compliance report according to the following schedule:
- (i) The first compliance report must cover the period beginning on the compliance date that is specified for the source ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months;
  - (ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively;
  - (iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31; and
  - (iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.
- (v) For startup, shutdown, or malfunction during the reporting period that is not consistent with the SSMP the Permittee must:
- (a) Inform DAQ by fax or telephone within 2 working days of the actions taken, and
  - (b) Inform DAQ within 7 working days with information as specified in 40 CFR § 63.10(d)(5)(ii).
- [40 CFR 63.2281, Table 9 of subpart DDDD]
- (2) The compliance report must contain the following:
- (i) Company name and address;

- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
- (iii) Date of report and beginning and ending dates of the reporting period;
- (iv) If you had a startup, shutdown, or malfunction during the reporting period and actions taken were consistent with the SSMP, the compliance report must include the information specified in the SSMP;
- (v) A description of control device maintenance performed while the control device was offline and one or more of the process units controlled by the control device was operating, including the information specified below:
  - (1) The date and time when the control device was shut down and restarted;
  - (2) Identification of the process units that were operating and the number of hours that each process unit operated while the control device was offline;
  - (3) The other following information of the control device that should be included are:
    - (A) The total amount of time that each process unit controlled by the control device operated during the semiannual compliance period and during the previous semiannual compliance period.
    - (B) The amount of time that each process unit controlled by the control device operated while the control device was down for maintenance covered under the routine control device maintenance exemption during the semiannual compliance period and during the previous semiannual compliance period.
    - (C) For each process unit, compute the annual percent of process unit operating uptime during which the control device was offline for routine maintenance using Equation 1 of this section.

$$RM = \frac{DT_p + DT_c}{PU_p + PU_c} \quad (\text{Eq. 1})$$

Where:

- RM = Annual percentage of process unit uptime during which control device is down for routine control device maintenance;
- PU<sub>p</sub> = Process unit uptime for the previous semiannual compliance period;
- PU<sub>c</sub> = Process unit uptime for the current semiannual compliance period;
- DT<sub>p</sub> = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period;
- DT<sub>c</sub> = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period.

- (vi) The results of any performance tests conducted during the semiannual reporting period;
- (vii) If there are no deviations from any applicable compliance option or operating requirement, a statement that there were no deviations from the compliance options, operating requirements during the reporting period. [40 CFR § 63.2281(c)]
- (viii) If the Permittee decides to install a continuous monitoring system (CMS) and there were no periods during which the continuous monitoring system (CMS), including CEMS (continuous emissions monitoring system) and CPMS (continuous parameter monitoring system), was out-of-control as specified in Sec. 63.8(c)(7), the Permittee needs to provide a statement that there were no periods during which the CMS was out-of-control during the reporting period. [40 CFR § 63.2281(c) (8)]
- (3) The Permittee must include in your semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal. [40 CFR 63.2281 (f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Permittee fails to meet the reporting schedule or fails to provide information required in the compliance report.

- C. **Woodworking equipment consisting of sawing and scoring equipment (ID No. ES-1A/1B) with two parallel bagfilters (ID No. BH1A/1B),**  
**Woodworking equipment consisting of the Newman station, and scoring, sawing, and sanding equipment (ID No. ES-2A) with fabric filter (ID No. BH2A),**  
**Woodworking equipment consisting of a shake machine, Weima grinder, and scoring equipment (ID No. ES-2B) with fabric filter (ID No. BH2B),**  
**Woodworking equipment consisting of lap line sanding, the ripper machine, and the fixed knife waste chopper (ID No. ES-3) with fabric filter (ID No. BH3),**  
**Woodworking equipment consisting of the panel line sanding unit, the Newman sanding station, the Newman machine, and the glue line sanding unit (ID No. ES-4) with fabric filter (ID No. BH4), and**  
**Pneumatic woodwaste transfer system (ID No. ES-5) with fabric filter (ID No. BH5).**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
Opacity	Visible emissions shall not exceed 20 percent opacity (for ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5)	15A NCAC 2D .0521

**1. 15A NCAC 2D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS**

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

**Monitoring** [15A NCAC 2Q .0508(f)]

- b. Particulate matter emissions from the woodworking equipment and woodwaste transfer system (ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5) shall be controlled with fabric filters (ID Nos. BH1A/1B, BH2A, BH2B, BH3, BH4, and BH5). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
  - i. a monthly external visual inspection of each system's ductwork (including any transfer cyclones) and material collection units for leaks; and
  - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the filters housing noting the structural integrity and the condition of the fabric filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork, cyclones and fabric filters are not inspected and maintained.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. The results of inspection and maintenance for the ductwork (including transfer cyclones), cyclone, and fabric filters shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of maintenance performed on any control device or collection system.

**Reporting** [15A NCAC 2Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the collection system/control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the

requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the woodworking equipment and woodwaste transfer system (**ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, once a week the Permittee shall observe the emission points of this source for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**D. Finishing operations including:**  
**lap coating line (ID No. ES-LL),**  
**panel coating line (ID No. ES-PL),**  
**prefinish coating line (ID No. ES-PF),**  
**Propane-fired bake oven (ID No. ES-SB),**  
**groove sealer spray booth (ID No. ES-SM), and**  
**shake edge seal spray booth (ID No. ES-SE)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521(d)
Volatile organic compounds	<i>ID No. ES-SB</i> : less than 40 tons per year	15A NCAC 2Q .0317 PSD avoidance condition
Volatile organic compounds	<i>ID No. ES-SM</i> : less than 40 tons per year	15A NCAC 2Q .0317 PSD avoidance condition
Volatile organic compounds	<i>ID No. ES-PF</i> : less than 40 tons per year	15A NCAC 2Q .0317 PSD avoidance condition
Volatile organic compounds	Work Practice Standards - See Section 2.2	15A NCAC 2D .0958
Toxic air pollutants	<b>State Only Requirement</b> Facility wide source specific TAP emission rates established pursuant to Acceptable Ambient levels - see Section 2.2 A.2.	15A NCAC 2D .1100
Toxic air pollutants	<b>State Only Requirement</b> Facility Wide Toxic Air pollutant Exemption Rates - see Section 2.2 A.3.	15A NCAC 2Q .0711
Toxic air pollutants	<b>State Only Requirement</b> Last MACT TAP Assessment - see Section 2.2 A.4.	15A NCAC 2Q .0705
Odor	<b>State Only Requirement</b> Odor control requirements - see Section 2.2 A.5.	15A NCAC 2D .1806
HAPs	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Wood Building Products - See Section 2.2 B.1. ( <i>except spray booth ID No. ES-SE</i> )	15A NCAC 2D .1111 40 CFR 63, Subpart QQQQ
HAPs	<i>Spray booth (ID No. ES-SE)</i> : National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 2D .1111 40 CFR 63, Subpart DDDD

**1. 15A NCAC 2D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS**

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

**Monitoring** [15A NCAC 2Q .0508(f)]

- b. Particulate matter emissions from the propane-fired bake oven (**ID No. ES-SB**), groove sealer spray booth (**ID No. ES-SM**), shake edge seal spray booth (**ID No. ES-SE**) and the two pre-finish line spray booths (**ID No.**

**ES-PF**) shall be controlled by adequate ductwork and properly designed collectors. To assure compliance, the Permittee shall perform inspections and maintenance. As a minimum, the inspection and maintenance program shall include:

- i. a weekly inspection of the spray booths' filters noting the condition; and
- ii. an annual (for each 12 month period following the initial inspection) inspection of the associated ductwork noting structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the filters are not inspected and maintained.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. The results of inspection and maintenance for the spray booths shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of maintenance performed on any filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the filters or ductwork within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the finishing operations shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If the emission source(s) are not operating, a record of this fact along with the corresponding date and time shall substitute for the monthly observation. For the shake edge seal spray booth (**ID No. ES-SE**), the Permittee shall establish "normal" for the source in the first 30 days following the effective date of the permit. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:

- i. the date and time of each recorded action;
- ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
- iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS**

**15A NCAC 2D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of this regulation, VOC emissions from the Propane-fired bake oven (**ID No. ES-SB**) shall be less than 40 tons per consecutive 12-month period.
- b. In order to avoid applicability of this regulation, VOC emissions from the Groove Sealer spray booth (**ID No. ES-SM**) shall be less than 40 tons per consecutive 12-month period.
- c. In order to avoid applicability of this regulation, VOC emissions from the pre-finish coating line (**ID No. ES-PF**) shall be less than 40 tons per consecutive 12-month period.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.
- e. Calculations and the total amount of VOC emissions shall be recorded monthly in a log (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions exceed this limit.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly product usage and VOC content for the previous 17 months.
  - ii. The monthly VOC emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not kept.

**ID No. ES-SE only:**

**4. 15A NCAC 2D .1111 [40 CFR Part 63, Subpart DDDD]**

**NESHAP for Plywood and Composite Wood Production**

- a. Pursuant to Table 3 to Subpart DDDD – Work Practice Requirements, Group 1 miscellaneous coating operations shall use non-HAP coatings as defined in §63.2292. Non-HAP coating means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens and below 1.0 percent by mass for all other HAP compounds. To demonstrate compliance, the Permittee shall submit a signed statement with the Notification of Compliance Status verifying the use of non-HAP coatings and records showing use of non-HAP coatings.

**Monitoring** [15A NCAC 2Q .0508(f)]

- b. To ensure continuous compliance, the Permittee shall keep records showing that only non-HAP coatings are being used.

**E. No. 6 fuel oil natural gas-fired boiler (ID No. ES-B1),  
Biomass/No. 6 fuel oil/natural gas-fired boiler (ID No. ES-B2) with scrubber (ID No. CD-2)  
and multicyclone (ID No. CD-1), and  
Biomass/No. 6 fuel oil/natural gas-fired boiler (ID No. ES-B3) with scrubber (ID No. CD-4)  
and multicyclone (ID No. CD-3)**

The following table provides a summary of limits and standards for the emission source(s) described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
sulfur dioxide	<i>ID Nos. ES-B1, ES-B2, and ES-B3:</i> 1.5 percent by weight sulfur content of the No. 6 fuel oil (nominally 1.57 lb/million Btu heat input)	15A NCAC 2D .0501(e)
	<i>ID No. ES-B1:</i> 44.4 million Btu per hour maximum heat input 1.25 million gallons No. 6 fuel oil per 12-month period 103 feet minimum boiler stack height	
	<i>ID No. ES-B2:</i> 92.0 pounds per hour sulfur dioxide emissions when firing any fuel combination  10 percent by weight minimum sulfur dioxide removal efficiency of the scrubber while firing No. 6 fuel oil only  65 million Btu per hour maximum heat input for No. 6 fuel oil  66 million Btu per hour maximum heat input for wood	
	<i>ID No. ES-B3:</i> 43.3 pounds per hour sulfur dioxide emissions when firing any fuel combination  80 percent by weight minimum sulfur dioxide removal efficiency of the scrubber while firing No. 6 fuel oil only  138 million Btu per hour maximum heat input for No. 6 fuel oil 1.5 million gallons No. 6 fuel oil per 12-month period	
particulate matter	<i>ID No. ES-B1 - POS: firing No. 6 fuel oil only</i> <i>ID No. ES-B2 - AOS: firing No. 6 fuel oil</i> <i>ID No. ES-B3- AOS: firing No. 6 fuel oil</i> 0.26 pounds per million Btu heat input	15A NCAC 2D .0503
particulate matter	<i>ID Nos. ES-B2, and ES-B3- POS: firing bio-mass only</i> 0.34 pounds per million Btu heat input	15A NCAC 2D .0504

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	<p><i>ID No. ES-B2 - AOS: firing biomass fuel in combination with No. 6 fuel oil</i></p> <p><i>ID No. ES-B3- AOS: firing biomass fuel in combination with No. 6 fuel oil</i></p> <p><math>E_c = [(0.34)(Q_w) + (0.26)(Q_o)]/Q_t</math></p> <p>where, <math>E_c</math> = emission limit for combination (lb/million Btu)  <math>Q_w</math> = actual wood heat input rate (Btu/hr)  <math>Q_o</math> = actual other fuel heat input rate (Btu/hr)  <math>Q_t</math> = total heat input rate (<math>Q_w + Q_o</math>)</p>	15A NCAC 2D .0504
sulfur dioxide	<p><i>ID Nos. ES-B1, ES-B2, and ES-B3:</i>                  2.3 pounds per million Btu heat input (superceded)</p>	15A NCAC 2D .0516
visible emissions	<p><i>ID Nos. ES-B1 and ES-B2:</i>                  40 percent opacity</p> <p><i>ID No. ES-B3:</i>                  20 percent opacity</p>	15A NCAC 2D .0521
nitrogen oxide	<p><i>ID No. ES-B3:</i>                  less than 355.3 tons per year</p>	15A NCAC 2Q .0317
particulate matter	<p><i>ID No. ES-B3:</i>                  0.10 pounds per million Btu heat input</p>	15A NCAC 2D .0530 BACT Limit
Mercury	<p><i>ID Nos. ES-B2 and ES-B3:</i>                  3200 grams per 24-hour period</p>	15A NCAC 2D .1110 40 CFR 61, Subpart E
sulfur dioxide	<p><i>ID No. ES-B3:</i>                  (Recordkeeping only)</p>	15A NCAC 2Q .0317 for avoidance of 15A NCAC 2D .0530
filterable PM mercury carbon monoxide  filterable PM mercury HCl carbon monoxide  hazardous air pollutants	<p><i>ID Nos. ES-B1 and ES-B2:</i>  <u><i>For No. 6 Fuel Oil Firing</i></u>                      0.45 lb/mmBtu                      2.0e-05 lb/mmBtu                      28 ppmvd corrected to 7% O<sub>2</sub></p> <p><u><i>For Biomass Firing (ES-B2 only)</i></u>                      0.27 lb/mmBtu                      5.0e-06 lb/mmBtu                      0.02 lb/mmBtu=                      2,718 ppmvd corrected to 7% O<sub>2</sub></p> <p><u><i>For Natural Gas</i></u>                      Best Combustion Practices</p>	15A NCAC 2D .1109

Regulated Pollutant	Limits/Standards	Applicable Regulation
filterable PM mercury carbon monoxide	<i>ID No. ES-B3:</i> <u>For No. 6 Fuel Oil Firing</u> 0.45 lb/mmBtu 2.0e-05 lb/mmBtu 28 ppmvd corrected to 7% O <sub>2</sub>	15A NCAC 2D .1109
filterable PM mercury HCl carbon monoxide	<u>For Biomass Firing</u> 0.18 lb/mmBtu 5.0e-06 lb/mmBtu 0.02 lb/mmBtu 2,718 ppmvd corrected to 7% O <sub>2</sub>	
hazardous air pollutants	<u>For Natural Gas</u> Best Combustion Practices	
Toxic air pollutants	<b>State enforceable-only:</b> See Section 2.2 A.2.	15A NCAC 2D .1100

POS= Primary Operating Scenario AOS=Alternative Operating Scenario

**ID Nos. ES-B1, ES-B2, and ES-B3:**

**1. 15A NCAC 2D. 0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS**

**15A NCAC 2D. 0402: AMBIENT AIR QUALITY STANDARDS - SULFUR OXIDES**

- a. Operation of the three boilers (**ID Nos. ES-B1, ES-B2, and ES-B3**) shall be limited as follows:
  - i. The sulfur content of the No. 6 fuel oil used in any boiler (**ID Nos. ES-B1, ES-B2, or ES-B3**) shall not exceed 1.5 percent by weight.
  - ii. The heat input shall not exceed the following:
    - (A) 44.4 million Btu per hour for boiler ES-B1,
    - (B) 65 million Btu per hour for boiler ES-B2 firing No. 6 fuel oil,
    - (C) 66 million Btu per hour for boiler ES-B2 firing wood, and
    - (D) 138 million Btu per hour for boiler ES-B3 firing No. 6 fuel oil.
  - iii. The stack on boiler B1 shall be 103 feet high or greater.
  - iv. Emissions of sulfur dioxide from the combustion of any fuel that are discharged from boiler ES-B2 into the atmosphere shall not exceed 92.0 pounds per hour.
  - v. Emissions of sulfur dioxide from the combustion of any fuel that are discharged from boiler ES-B3 into the atmosphere shall not exceed 43.3 pounds per hour.
  - vi. The No. 6 fuel oil consumption in boiler ES-B3 shall not exceed 1.5 million gallons per 12-month period.
  - vii. The No. 6 fuel oil consumption in boiler ES-B1 shall not exceed 1.25 million gallons per 12-month period.
  - viii. The minimum sulfur dioxide removal efficiency of the scrubbers (**ID Nos. CD-2 and CD-4**) while firing No. 6 fuel oil only shall be the following:
    - (A) Ten percent by weight for boiler ES-B2 and
    - (B) Eighty percent by weight for boiler ES-B3.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
  - i. The name of the fuel oil supplier;
  - ii. The maximum sulfur content of the fuel oil received during the quarter;
  - iii. The method used to determine the maximum sulfur content of the fuel oil; and

iv. A certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0501 if the sulfur content of the oil is not monitored and recorded.

d. Sulfur dioxide emissions from each boiler (**ID Nos. ES-B2 and ES-B3**) shall be controlled by the associated wet scrubber. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:

- i. A monthly external visual inspection of each system's ductwork and material collection units for leaks; and
- ii. An annual (for each 12 month period following the initial inspection) internal inspection of each scrubber's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0501 if the scrubbers and ductwork are not inspected and maintained.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

e. The Permittee shall record in a log (written or electronic form) the following:

- i. The actual amount of fuel oil combusted each hour of operation for each boiler,
- ii. The maximum weight percent of sulfur in the fuel oil used in the boilers,
- iii. The actual monthly amount of No. 6 fuel oil fired in each boiler,
- iv. The maximum amount of fuel oil combusted during any consecutive 12 month period for boiler ES-B1 and ES-B3,
- v. The maximum hourly fuel oil usage rate for each month for boilers ES-B1 and ES-B3, and
- vi. The times of startup and shutdown of each boiler.

**Reporting** [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The summary report shall contain the following:

- i. The maximum weight percent of sulfur in the fuel oil used in the boilers,
- ii. The actual monthly amount of No. 6 fuel oil fired in each boiler,
- iii. The maximum amount of fuel oil combusted during any consecutive 12 month period for boilers ES-B1 and ES-B3, and
- iv. The maximum hourly fuel oil usage rate for each month for boilers ES-B1 and ES-B3.

**ID No. ES-B1 - POS: firing No. 6 fuel oil only**

**ID No. ES-B2 - AOS: firing No. 6 fuel oil only**

**ID No. ES-B3 - AOS: firing No. 6 fuel oil only**

**2. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of No. 6 fuel oil that are discharged from boiler (**ID No. ES-B1**) into the atmosphere shall not exceed 0.26 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of No. 6 fuel oil that are discharged from each boiler (**ID Nos. ES-B2 and ES-B3**) into the atmosphere shall not exceed 0.26 pounds per million Btu heat input.

**Testing** [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Section 2.1 E. 2. a-b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

d. No monitoring/recordkeeping/reporting is required for particulate matter emissions from No. 6 fuel oil.

**ID Nos. ES-B2 and ES-B3: POS-firing biomass fuel only**

**3. 15A NCAC 2D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of wood (biomass) that are discharged from boilers (**ID Nos. ES-B2 and ES-B3**) into the atmosphere shall not exceed 0.34 pounds per million Btu heat input.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Section 2.1 E. 3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504

**Monitoring** [15A NCAC 2Q .0508(f)]

- c. Particulate matter emissions from each boiler (**ID Nos. ES-B2 and ES-B3**) shall be controlled by the associated multicyclone and wet scrubber. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- A monthly external visual inspection of each system's ductwork and material collection units for leaks; and
  - An annual (for each 12 month period following the initial inspection) internal inspection of each multicyclone's and scrubber's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the multicyclones, scrubbers, and ductwork are not inspected and maintained.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
- The date and time of each recorded action;
  - The results of each inspection;
  - A report of any maintenance performed on any multicyclone or scrubber; and
  - Any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if these records are not kept.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**ID No. ES-B2 - AOS: firing biomass fuel in combination with No. 6 fuel oil**

**ID No. ES-B3 - AOS: firing biomass fuel in combination with No. 6 fuel oil**

**4. 15A NCAC 2D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the co-firing of wood with No. 6 fuel oil that are discharged from any boiler (**ID No. ES-B2 or ES-B3**) into the atmosphere shall not exceed  $(0.34Q_w + 0.26Q_o)/(Q_w + Q_o)$  pounds per million Btu heat input, where  $Q_w$  is the heat input rate from wood and  $Q_o$  is the heat input rate from No. 6 fuel oil.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Section 2.1 E.3.c-f. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the multicyclones, scrubbers, and ductwork are not inspected and maintained or if the records are not kept.

**ID Nos. ES-B1, ES-B2, and ES-B3:**

**5. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from each of these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.5.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from wood for these sources.
- d. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Section 2.1 E.1.c-f. If any No. 6 fuel oil is burned in the boilers, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the oil is not monitored and recorded.

**ID Nos. ES-B1, ES-B2, and ES-B3:**

**6. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from boiler (**ID No. ES-B3**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.
- b. Visible emissions from boilers (**ID Nos. ES-B1 and ES-B2**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.

**Testing** [15A NCAC 2Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Section 2.1 E.6.a-b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring** [15A NCAC 2Q .0508(f)]

- d. To assure compliance, once a day the Permittee shall observe the emission points of these sources for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If the emission source(s) is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.6.a-b. above. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. The date and time of each recorded action;
  - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. The results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each

calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**ID No. ES-B3:**

**7. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS for Prevention of Significant Deterioration Applicability**

- a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, boiler B3 (**ID No. ES-B3**) shall discharge into the atmosphere less than 355.3 tons of nitrogen oxide emissions per consecutive 12-month period.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.7.a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. The Permittee shall keep monthly records in a log (written or in electronic format) of the steam production and the amount of fuel input to the boiler (**ID No. ES-B3**). The energy input to the boiler from solid fuel shall be calculated by subtracting the energy input from fuel oil from the total energy input. Calculations shall be performed monthly to evaluate energy input to the boiler and resultant nitrogen oxide emissions. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.
- d. The use of fuel in boiler B3 (**ID No. ES-B3**) shall be limited to 180.6 million Btu per hour per 12 month period on a 12 month rolling average to ensure that nitrogen oxide emissions shall not exceed 355.3 tons for any consecutive 12-month period. (The SO<sub>2</sub> limitation for ambient standards precedes this condition.) The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the nitrogen oxide emissions exceed the limit in Section 2.1 E.7.a.

**Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following:
  - i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
  - ii. The monthly energy input from solid fuels into the boiler for the previous 17 months
  - iii. The total monthly energy input into the boiler for the previous 17 months; and
  - iv. The average hourly energy input into the boiler for each of the three 12-month periods over the previous 17 months.

**ID No. ES-B3:**

**8. 15A NCAC 2D. 0530: Prevention of Significant Deterioration; BACT Limitation**

- a. Particulate matter emissions from the boiler (**ID No. ES-B3**) shall not exceed 0.10 pounds per million Btu heat input.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E. 8. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Sections 2.1 E.2.e-f , 2.1 E.3.c-f, and 2.1 E.4.d-e. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the emissions exceed the limit in Section 2.1 E.8.a. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the multicyclones, scrubbers, and ductwork are not inspected and maintained.

**ID No. ES-B3:**

9. **15A NCAC 2D .0530(v) Use of Projected Actual Emissions** – Pursuant to 15A NCAC 2D .0530(v), the applicant relied on the use of projected actual emissions to demonstrate that using the boiler (**ID No. ES-B3**) to control emission from zones 3 through 7 of Line 1 steam-heated bake oven (**ID No. ES-L1BO**) and of Line 2 steam-heated bake oven (**ID No. ES-L2BO**) would not result in a significant emissions increase. The Permittee shall maintain records of emissions related to the combustion of emissions from zones 3 through 7 of Line 1 steam-heated bake oven (**ID No. ES-L1BO**) and of Line 2 steam-heated bake oven (**ID No. ES-L2BO**) in the boiler (**ID No. ES-B3**) for five years beginning on the date the emissions are first vented to the boiler.

**10. ALTERNATIVE OPERATING SCENARIOS** [15A NCAC 2Q .0508(p)]

The Permittee, contemporaneously with making a change from one alternate operating scenario to another, shall record in a log (written or electronic format) the scenario under which it is operating. [15A NCAC 2Q .0508(p)]

**11. 15A NCAC 2D .1109: Case-by-Case MACT**

- a. The initial compliance date for the emission limitations and associated monitoring, recordkeeping, and reporting requirements listed below is **November 1, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 2D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.
- b. Emissions from these sources shall not exceed the emissions limitations listed below as a result of firing **No. 6 fuel oil**:
  - i. Filterable PM: 0.45 lbs/mmBtu
  - ii. Mercury (Hg): 2.0e-05 lbs/mmBtu
  - iii. Carbon Monoxide (CO): 28 ppmvd, corrected to 7% oxygen
- c. Emissions from these sources shall not exceed the emissions limitations listed below as a result of firing **biomass**:
  - i. Filterable PM:
    - (A) **ID Nos. ES-B1 & ES-B2**: 0.27 lbs/mmBtu
    - (B) **ID No. ES-B3**: 0.18 lbs/mmBtu
  - ii. Mercury (Hg): 5.0e-06 lbs/mmBtu
  - iii. Hydrogen Chloride-equivalent (HCl): 0.02 lbs/mmBtu
  - iv. Carbon Monoxide (CO): 2,718 ppmvd, corrected to 7% oxygen

**Compliance Testing** [15A NCAC 2Q .0508(f)]

- d. **ID Nos. ES-B1**: To demonstrate compliance with the standards provided in Section 2.1 E.12.b. above, the Permittee shall conduct compliance tests for each listed pollutant. The Permittee may chose either of the following methods for the compliance tests:
  - i. Initial & Periodic Stack Testing. Stack testing shall be performed in accordance with General Condition JJ in Section 3 of this permit. Tests may not be conducted during periods of startup, shutdown, or malfunction. Following the initial compliance test, the Permittee shall test the boiler annually. Each stack test shall be conducted between 11 and 13 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant.
  - ii. Periodic Fuel Analysis. The Permittee may use a fuel analysis to demonstrate compliance with the mercury HCl standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 E.11.b., the Permittee shall conduct a follow-up stack test of the affected source within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109.  
The initial compliance test shall be conducted within 180 days of the initial compliance date. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.1 E.11.b. above.
- e. **ID Nos. ES-B2 & ES-B3**: To demonstrate compliance with the standards provided in Section 2.1 E.12.b. and c. above, the Permittee shall conduct compliance tests for each listed pollutant. The Permittee may chose either of the following methods for the compliance tests:
  - i. Initial & Periodic Stack Testing. Stack testing shall be performed in accordance with General Condition JJ

in Section 3 of this permit.

(A) To demonstrate compliance with the standards in Section 2.1.E.11.b., the affected boilers shall fire only No. 6 fuel oil during the stack test.

(B) To demonstrate compliance with the standards in Section 2.1 E.11.c., the affected boilers shall fire biomass during the test.

Stack tests shall be used to establish minimum liquid flow rates at the associated scrubbers. Tests may not be conducted during periods of startup, shutdown, or malfunction. Following the initial compliance test, the Permittee shall test the boilers annually. Each stack test shall be conducted between 11 and 13 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant.

- ii. Periodic Fuel Analysis. The Permittee may use a fuel analysis to demonstrate compliance with the mercury and/or HCl standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 E.11.b. or c., the Permittee shall conduct a follow-up stack test of the affected sources within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109.

The initial compliance test shall be conducted within 180 days of the initial compliance date. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.1 E.11.b. or c. above.

**Work Practice Standards** [15A NCAC 2Q .0508(f)]

- f. The Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
- i. Inspect the burner, and clean or replace any components of the burner as necessary;
  - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
  - iii. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

- g. The results of any required annual burner inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. The date of each recorded action;
  - ii. The results of each inspection; and,
  - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

- h. The Permittee shall conduct annual inspections of the multiclones (**ID Nos. CD-1 and CD-3**) and record the results of inspections as provided in Section 2.1 E.3.c. and d. of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these inspections are not performed or the required records are not created and maintained.

**Operating Standards & Continuous Monitoring Requirements** [15A NCAC 2Q .0508(f)]

- i. The liquid flow rate at the affected scrubbers (**ID Nos. CD-2 and CD-4**) shall be maintained at or above the operating limit established during the performance test on a 12-hour block average.
- j. **The Permittee shall submit a permit application within 180 days of initial compliance date to incorporate the operating parameter limitations for the scrubbers into the Title V air quality permit. Such modification may be made by Administrative Amendment to the Title V air quality permit.**
- k. The Permittee shall install, calibrate, and maintain liquid flow rate monitoring devices at each of the affected scrubbers (**ID Nos. CD-2 and CD-4**) in accordance with manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. Each monitor shall be equipped with a continuous recorder. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the required monitoring devices are not installed and operated as

required above.

- l. The Permittee shall maintain the following records of the continuous and 12-hour block average liquid flow rates for the affected scrubbers (**ID Nos. CD-2 and CD-4**). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the above records are not created and maintained, or if any 12-hour block average is not within the allowable limit, as provided in Section 2.1 E.11.i. of this permit.

**Reporting** [15A NCAC 2Q .0508(f)]

- m. **Notification of Compliance Status.** The Permittee must submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration. The Notification of Compliance Status report must contain the following information, as applicable:
  - i. A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
  - ii. Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance.
  - iii. A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.
- n. **Semiannual Summary Report.** The Permittee shall submit a summary report by January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The first summary report shall be required on January 30, 2014. The report shall include the following:
  - i. Company name and address;
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
  - iii. Date of report and beginning and ending dates of the reporting period;
  - iv. A summary of the results of the annual performance tests;
  - v. Signed statement indicating that no new types of fuel were fired in the affected sources.

**F. Two natural gas-fired temporary boilers (ID Nos. ES-B4T and ES-B5T) equipped with low-NOx burners**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.22 lb/million Btu heat input	15A NCAC 2D .0503
sulfur dioxide	2.3 lbs/million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity	15A NCAC 2D .0521
-	Recordkeeping Requirements	15A NCAC 2D .0524 (40 CFR 60, Subpart Dc)
Toxic air pollutants	<b>State enforceable-only:</b> See Section 2.2 A.2.	15A NCAC 2D .1100
hazardous air pollutants	Best Combustion Practices	15A NCAC 2D .1109

**1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas, that are discharged from these boilers into the atmosphere shall not exceed 0.22 pound per million Btu heat input each.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

**2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 F. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions when burning natural gas in these boilers.

**3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions when burning natural gas from these sources.

**4. 15A NCAC 2D .0524: NSPS 40 CFR 60, SUBPART Dc**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

**Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records for each boiler on a monthly basis of the amounts of natural gas fired. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- c. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
- i. The Permittee shall report the amount of natural gas fired in each boiler on an annual basis.
  - ii. All instances of deviations from the requirements of this permit must be clearly identified.

**5. 15A NCAC 2D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters**

- a. The Permittee shall use best combustion practices when operating the affected boilers (**ID Nos. ES-B4T and ES-B5T**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **November 1, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

**Monitoring** [15A NCAC 2Q .0508(f)]

- b. To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include

the following:

- i. Inspect the burner, and clean or replace any components of the burner as necessary;
- ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
- iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date of each recorded action;
  - ii. The results of each inspection; and,
  - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- d. No reporting is required.

**G. Trimboard Line with Cold Press (ID No. ES-TB-1);**

The following table provides a summary of limits and standards for the emission source(s) described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Toxic air pollutants	<b>State Only Requirement</b> Facility wide source specific TAP emission rates established pursuant to Acceptable Ambient levels - see Section 2.2 A.2	15A NCAC 2D .1100
Toxic air pollutants	<b>State Only Requirement</b> Facility Wide Toxic Air pollutant Exemption Rates - see Section 2.2 A.3	15A NCAC 2Q .0711
Toxic air pollutants	<b>State Only Requirement</b> Last MACT TAP Assessment - see Section 2.2 A.4	15A NCAC 2Q .0705
Odor	<b>State Only Requirement</b> Odor control requirements - see Section 2.2 A.5	15A NCAC 2D .1806
HAPs	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Wood Building Products - See Section 2.2 B. 1.	15A NCAC 2D.1111 40 CFR 63, Subpart QQQQ

**H. Two backup diesel-fired generators (each with rating up to 500 brake horsepower) (ID Nos. ES-DGEN1 and ES-DGEN2), one temporary diesel-fired emergency generators (rating up to 2521 brake horsepower or 1880 Kilowatt, ID No. ES-DGEN3)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 lbs/million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity	15A NCAC 2D .0521
-	Recordkeeping Requirements	15A NCAC 2D .0524 (40 CFR 60 Subpart III)
nitrogen oxides	Less than 40 tons per consecutive 12-month period for ES-DGEN1 and ES-DGEN2 and less than 40 tons per consecutive 12-month period for ES-DGEN3	15A NCAC 2Q .0317 (15A NCAC 2D .0530 Avoidance)
Toxic air pollutants	<b>State enforceable-only:</b> See Section 2.2 A.2.	15A NCAC 2D .1100

**1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions when burning diesel fuel in these generators.

**2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions when burning diesel fuel in these generators.

**3. 15A NCAC 2D .0524: NSPS 40 CFR PART 60, SUBPART III**

- a. For any diesel-fired generator manufactured after April 1, 2006, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524, "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart III, including Subpart A, "General Provisions."

**Notifications and Reports** [15A NCAC 2Q .0508(f)]

- b. *Initial Notification.* At least 7 days prior to operating any generator at the facility, the Permittee shall submit a written notification to the Regional Supervisor, DAQ including the following information:
- i. a description of the unit including operating capacity (in kilowatts and brake horsepower);

- ii. the date the generator was manufactured;
- iii. the purpose/function of the generator;
- iv. the anticipated date for the generator start-up;
- v. the anticipated time the generator will be onsite; and
- vi. a statement indicating whether or not the generator will be affected by 15A NCAC 2D .0524 (i.e., 40 CFR 60, Subpart IIII) or 15A NCAC 2D .1111 (i.e., 40 CFR 63, Subpart ZZZZ);

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .0524 if the initial notifications are not submitted as described above.

- vii. Additionally, for generator (ID No. ES-DGEN3) the Permittee should provide the following information:
  1. The name and address of the owner or operator;
  2. The address (i.e., physical location) of the affected source;
  3. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
  4. A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
  5. A statement of whether the affected source is a major source or an area source.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D.1111 if the above initial notifications are not submitted as described above.

#### 4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS

##### 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 2D .0530 (g) for major sources and major modifications, the diesel-fired generators (**ID Nos. ES-DGEN1 and ES-DGEN2**) shall not discharge into the atmosphere more than 40 tons of nitrogen oxides per consecutive twelve month period and the diesel-fired generator (**ID No. ES-DGEN3**) shall not discharge into the atmosphere more than 40 tons of nitrogen oxides per consecutive twelve month period.

##### Testing [15A NCAC 2Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A General Condition JJ. If the results of this test are above the limits given in Section 2.1 H.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

##### Monitoring/ Recordkeeping [15A NCAC 2Q .0508(f)]

- c. To ensure that nitrogen oxides emissions are less than the above-specified limits, the Permittee shall not operate the generators (**ID Nos. ES-DGEN1 and ES-DGEN2**) more than **2,500 hours combined** per consecutive twelve (12) month period and the generator (**ID No. ES-DGEN3**) more than **500 hours** per consecutive twelve (12) month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the actual hours of operation for the generators exceeds this limit.
- d. To ensure compliance, the Permittee shall maintain records as follows:
  - i. The Permittee shall record and maintain records of the hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) on a daily basis when the generators are in use; and
  - ii. The Permittee shall total the hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) on a monthly basis.

The records of hours of operation shall be made available to an authorized representative of DAQ upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the daily hours of operation are not recorded.

##### Reporting [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) for the previous 17 months. The total hours of operation per 12-month period must be calculated for each month of the reporting period as defined above; and

- ii. All instances of deviations from the requirements of this permit must be clearly identified.

**I. Waste water treatment plant. (ID No. ES-WWTP)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	<b>State Only Requirement</b> Facility Wide Toxic Air pollutant Exemption Rates. See Section 2.2 A.2	15A NCAC 2Q .0711
Toxic air pollutants	<b>State enforceable-only:</b> See Section 2.2 A.2.	15A NCAC 2D .1100

**2.2 - Multiple Emission Source(s) Specific Limitations and Conditions**

**A. Facility-wide emission sources**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Work practice standards	15A NCAC 2D .0958
Toxic air pollutants	<b>State Only Requirement</b> Facility wide source specific TAP emission rates established pursuant to Acceptable Ambient levels	15A NCAC 2D .1100
Toxic air pollutants	<b>State Only Requirement</b> Facility Wide Toxic Air pollutant Exemption Rates	15A NCAC 2Q .0711
Toxic air pollutants	<b>State Only Requirement</b> Last MACT/air toxics demonstration	15A NCAC 2Q .0705
Odorous emissions	<b>State Only Requirement</b> Odor control requirements	15A NCAC 2D .1806

**1. 15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS**

- a. Pursuant to 15A NCAC 2D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:
  - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  - iii. store wipe rags containing volatile organic compounds in closed containers,
  - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
  - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
  - i. flush parts in the freeboard area,
  - ii. take precautions to reduce the pooling of solvent on and in the parts,
  - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,

- iv. not fill cleaning machines above the fill line,
- v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

**Monitoring**

- c. To assure compliance with paragraphs (a) and (b) above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

**Recordkeeping**

- d. The results of the inspections shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each inspection; and
  - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
 If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

**Reporting**

- e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**State-enforceable only:**

- 2. **2D .1100 CONTROL OF TOXIC AIR POLLUTANTS** – Pursuant to 15A NCAC 2D .1100, “Control of Toxic Air Pollutants,” and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS Scenario 1	EMISSION LIMITS Scenario 2
No. 6 fuel oil/natural gas-fired boiler (44.4 mmBtu/hr rated capacity) ES-B1	Formaldehyde	0.010 lbs/hr	----
	Arsenic and compounds	1.647 lbs/yr	----
	Benzene	0.267 lbs/yr	----
	Cadmium	0.498 lbs/yr	----
	Fluorides	0.264 lbs/day	----
	Nickel	0.600 lbs/day	----
	Chromium VI and compounds	0.310 lbs/yr	----
	Sulfuric Acid	2.980 lbs/hr 67.2 lbs/day	----
Biomass/No. 6 fuel oil/natural gas-fired boiler (ID No. ES-B2)	Acrolein	0.0062 lbs/hr	----
	Acetaldehyde	0.0182 lbs/hr	----
	Formaldehyde	0.0561 lbs/hr	----
	Phenol	0.0007 lbs/hr	----
	Arsenic and compounds	0.702 lbs/yr	----
	Benzene	187 lbs/yr	----
	Benzo(a)pyrene	1.8 lbs/yr	----
	Cadmium	0.211 lbs/yr	----

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS Scenario 1	EMISSION LIMITS Scenario 2
	Flourides	0.3888 lbs/day	----
	Hexachlorodibenzo-p-dioxin	1.113 lbs/yr	----
	Methyl ethyl ketone	0.0007 lbs/hr 0.0171 lbs/day	----
	Methyl isobutyl ketone	0.0018 lbs/hr 0.0437 lbs/day	----
	Nickel	0.0013 lbs/day	----
	Chromium VI and compounds	0.5913 lbs/yr	----
	Sulfuric Acid	3.66 lbs/hr 87.84 lbs/day	----
	Toluene	0.065 lbs/day	----
	Vinyl Chloride	12.439 lbs/yr	----
Biomass/No. 6 fuel oil/natural gas-fired boiler (ID No. ES-B3)	Acrolein	0.0214 lbs/hr	0.0143 lbs/hr
	Acetaldehyde	0.0619 lbs/hr	0.0421 lbs/hr
	Formaldehyde	0.207 lbs/hr	0.13 lbs/hr
	Phenol	0.0558 lbs/hr	0.00167 lbs/hr
	Arsenic and compounds	1.06 lbs/yr	1.06 lbs/yr
	Benzene	433 lbs/yr	433 lbs/yr
	Benzo(a)pyrene	4.17 lbs/yr	4.17 lbs/yr
	Cadmium	0.321 lbs/yr	0.321 lbs/yr
	Flourides	0.823 lbs/day	0.823 lbs/day
	Hexachlorodibenzo-p-dioxin	2.567 lbs/yr	2.567 lbs/yr
	Methyl ethyl ketone	0.005 lbs/hr 0.120 lbs/day	0.00165 lbs/hr 0.04 lbs/day
	Methyl isobutyl ketone	0.013 lbs/hr 0.319 lbs/day	0.0042 lbs/hr 0.101 lbs/day
	Nickel	0.187 lbs/day	0.187 lbs/day
	Chromium VI and compounds	0.981 lbs/yr	0.981 lbs/yr
	Sulfuric Acid	0.620 lbs/hr 14.88 lbs/day	0.620 lbs/hr 14.88 lbs/day
	Toluene	0.137 lbs/day	0.137 lbs/day
Vinyl Chloride	28.820 lbs/yr	28.820 lbs/yr	
Thermomechanical pulping systems: (ID Nos. ES-L1R1, ES-L1R2, ES-L1R3, ES-L2R1, ES-L2R2, ES-L2R3, and ES-L1R4)	Acrolein	0.010 lbs/hr	0.15 lbs/hr
	Acetaldehyde	0.130 lbs/hr	1.76 lbs/hr
	Formaldehyde	0.190 lbs/hr	1.47 lbs/hr
	Phenol	0.045 lbs/hr	0.10 lbs/hr
	Methyl Ethyl Ketone	0.091 lbs/hr 2.184 lbs/day	1.08 lbs/hr 25.92 lbs/day
	Methyl Isobutyl Ketone	0.001 lbs/hr 0.019 lbs/day	0.002 lbs/hr 0.048 lbs/day

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS Scenario 1	EMISSION LIMITS Scenario 2
Thermomechanical pulping systems: (ID Nos. ES-L1D1, ES-L1D2, ES-L2D1, ES-L2D2) vented to scrubber	Acrolein	0.145 lbs/hr	0.0 Bypassed
	Acetaldehyde	0.815 lbs/hr	0.0 Bypassed
	Formaldehyde	0.013 lbs/hr	0.0 Bypassed
	Phenol	0.001 lbs/hr	0.0 Bypassed
	Methyl Ethyl Ketone	0.740 lbs/hr 17.760 lbs/day	0.0 Bypassed
	Methyl Isobutyl Ketone	0.001 lbs/hr 0.024 lbs/day	0.0 Bypassed
Hardboard manufacturing equipment: (ID Nos. ES-L1P, ES-L1CH, ES-L1LVP, ES-L1HDP, ES-L1IH, ES-L1SVP, ES-L2P, ES-L2CH, ES-L2LVP, ES-L2HDP, ES-L2IH, and ES-L2SVP)	Acrolein	1.830 lbs/hr	----
	Acetaldehyde	1.26 lbs/hr	----
	Formaldehyde	4.350 lbs/hr	----
	Phenol	8.490 lbs/hr	----
	Methyl Ethyl Ketone	1.05 lbs/hr 25.2 lbs/day	----
	Methyl Isobutyl Ketone	2.68 lbs/hr 64.32 lbs/day	----
Bake ovens (ID Nos. ES-L1BO and ES-L2BO)	Acrolein	0.290 lbs/hr	0.64 lbs/hr
	Acetaldehyde	0.400 lbs/hr	1.39 lbs/hr
	Formaldehyde	1.460 lbs/hr	5.31 lbs/hr
	Phenol	2.640 lbs/hr	5.34 lbs/hr
	Methyl Ethyl Ketone	0.430 lbs/hr 10.320 lbs/day	0.59 lbs/hr 14.16 lbs/day
	Methyl Isobutyl Ketone	0.470 lbs/hr 11.280 lbs/day	0.93 lbs/hr 22.32 lbs/day
Trimboard press (ID No. ES-TB1)	Acetaldehyde	0.390 lbs/hr	----
	Formaldehyde	0.400 lbs/hr	----
Three hardboard finishing lines (ID Nos. ES-PL, ES-LL, and ES-PF)	Formaldehyde	2.00 lbs/hr	----
	Arsenic and compounds	0.137 lbs/yr	----
	Benzene	1.437 lbs/yr	----
	Benzo(a)pyrene	0.0008 lbs/yr	----
	Cadmium	0.753 lbs/yr	----
	Methyl Ethyl Ketone	0.00002 lbs/hr 0.0005 lbs/day	----
	Nickel	0.004 lbs/day	----
	Chromium VI	0.955 lbs/yr	----
	Toluene	0.006 lbs/day	----
Groove sealer spray booth (ID No. ES-SM)	Formaldehyde	0.040 lbs/hr	----
	Toluene	201 lbs/day	----
Accessory spray booth (ID No.	Formaldehyde	0.003 lbs/hr	----

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS Scenario 1	EMISSION LIMITS Scenario 2
ES-SB)	Arsenic and compounds	0.0009 lbs/yr	----
	Benzene	0.009 lbs/yr	----
	Benzo(a)pyrene	0.000005 lbs/yr	----
	Cadmium	0.005 lbs/yr	----
	Methyl Ethyl Ketone	0.0000001 lbs/hr 0.000003 lbs/day	----
	Nickel	0.00002 lbs/day	----
	Chromium VI and compounds	0.006 lbs/yr	----
	Toluene	27.4 lbs/day	----
Fuel wood system (ID No. ES-FS1)	Acrolein	0.067 lbs/hr	----
	Acetaldehyde	0.169 lbs/hr	----
	Formaldehyde	0.015 lbs/hr	----
	Phenol	0.210 lbs/hr	----
	Methyl Ethyl Ketone	0.620 lbs/hr 14.880 lbs/day	----
Wastewater treatment plant (ID No. ES-WWTP)	Acetaldehyde	19.12 lbs/hr	----
	Formaldehyde	0.068 lbs/hr	----
	Phenol	0.062 lbs/hr	----
	Methyl Ethyl Ketone	0.248 lbs/hr 5.952 lbs/day	----
	Methyl Isobutyl Ketone	Nothing shown	----
	Toluene	28.320 lbs/day	----
Various stock chests (Permit exempt equipment)	Formaldehyde	0.074 lbs/hr	----
Various chemical tanks (Permit exempt equipment)	Formaldehyde	0.080 lbs/hr	----
	Phenol	0.160 lbs/hr	----
Various gasoline tanks (Permit exempt equipment)	Benzene	11.476 lbs/yr	----
	Toluene	2.952 lbs/day	----
Gasoline generators	Acetaldehyde	0.000150 lbs/hr	----
	Formaldehyde	0.00024 lbs/hr	----
Diesel generators (DGEN1 and DGEN 2)	Acrolein	0.0007 lbs/hr	----
	Acetaldehyde	0.005 lbs/hr	----
	Formaldehyde	0.008 lbs/hr	----
	Benzene	56.940 lbs/yr	----
	Benzo(a)pyrene	0.011 lbs/yr	----
	Toluene	0.069 lbs/day	----
Diesel generator (DGEN3)	Acrolein	0.0001 lbs/hr	----
	Acetaldehyde	0.0004 lbs/hr	----

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS Scenario 1	EMISSION LIMITS Scenario 2
	Formaldehyde	0.001 lbs/hr	----
	Benzene	114 lbs/yr	----
	Benzo(a)pyrene	0.039 lbs/yr	----
	Toluene	0.115 lbs/day	----
160 hp fire rump	Acrolein	0.0001 lbs/hr	----
	Acetaldehyde	0.001 lbs/hr	----
	Formaldehyde	0.002 lbs/hr	----
	Benzene	8.760 lbs/yr	----
	Benzo(a)pyrene	0.002 lbs/yr	----
	Toluene	0.011 lbs/day	----
215 hp fire rump	Acrolein	0.0001 lbs/hr	----
	Acetaldehyde	0.001 lbs/hr	----
	Formaldehyde	0.002 lbs/hr	----
	Benzene	12.264 lbs/yr	----
	Benzo(a)pyrene	0.003 lbs/yr	----
	Toluene	0.016 lbs/day	----
Natural gas-fired temporary boiler (B4T)	Formaldehyde	0.004 lbs/hr	----
	Benzene	1.051 lbs/yr	----
	Benzo(a)pyrene	0.001 lbs/yr	----
	Cadmium	0.534 lbs/yr	----
	Methyl ethyl ketone	0.00001 lbs/hr 0.0003 lbs/day	----
	Nickel	0.003 lbs/day	----
	Chromium VI and compounds	0.202 lbs/yr	----
	Toluene	0.005 lbs/day	----
Natural gas-fired temporary boiler (B5T)	Formaldehyde	0.007 lbs/hr	----
	Benzene	1.752 lbs/yr	----
	Benzo(a)pyrene	0.001 lbs/yr	----
	Cadmium	0.964 lbs/yr	----
	Methyl ethyl ketone	0.00003 lbs/hr 0.0006 lbs/day	----
	Nickel	0.005 lbs/day	----
	Chromium VI and compounds	0.350 lbs/yr	----
	Toluene	0.008 lbs/day	----

Scenario 1 represents normal operating conditions

Scenario 2 includes scrubber and Boiler #3 bypass conditions

- a. To ensure compliance with the above limits, the following restrictions shall apply:
  - i. No salt treated (copper, chrome, arsenate) wood waste may be burned in boilers (ID Nos. ES-B2 and ES-B3).

- ii. In the form of raw materials (resin and compregnite), the total phenol and "free" formaldehyde addition rates shall not exceed 155 and 46 pounds per hour, respectively, to Line No. 1 and Line No. 2 presses (ID Nos. ES-L1P and ES-L2P).
  - iii. Formaldehyde input to the trimboard manufacturing process (ID No. ESG-TB) in the form of glue shall not exceed 3.08 pounds of "free" formaldehyde per hour.
  - iv. Formaldehyde input to the shake paint machine in the form of coatings shall not exceed 0.04 pounds of total formaldehyde per hour.
  - v. Formaldehyde input to the lap line, panel line, and pre-finish line (ID Nos. ES-LL, ES-PL, and ES-PF) in the form of coatings shall not exceed 4.61 pounds of total formaldehyde per hour.
- b. For compliance purposes, within 30 days after each calendar year half the following shall be reported to the Regional Supervisor, Division of Air Quality:
- i. the "free" formaldehyde, and phenol input rates to the hardboard presses shall be calculated and recorded on an hourly basis, on the hour; [For periods of uniform input, one calculation may be submitted to represent the hourly input to the hardboard presses for the entire period of uniformity. Inputs for hours only partially with in a period of uniformity shall be calculated individually.]
  - ii. the "free" formaldehyde input to the trimboard line shall be calculated and recorded on an hourly basis, on the hour, [For periods of uniform input, one calculation may be submitted to represent the hourly input to the trimboard press for the entire period of uniformity. Inputs for hours only partially with in a period of uniformity shall be calculated individually.]
  - iii. total formaldehyde input to the Groove sealer spray booth (ID No. ES-SM) shall be calculated and recorded on an hourly basis on the hour, [This record keeping requirement may be fulfilled by recording the daily coating usage, and the necessary hourly operational parameters, and then back calculating the hourly inputs.]
  - iv. coating usage at the lap line, panel line, and pre-finish line (ID Nos. ES-LL, ES-PL, and ES-PF) shall be recorded on an hourly basis, on the hour in order to calculate formaldehyde input, and [This record keeping requirement may be fulfilled by recording the daily coating usage, the necessary hourly operational parameters, and then back calculating the hourly formaldehyde inputs. For periods of uniform input, one calculation may be submitted to represent the hourly formaldehyde input to the lap line, panel line, and pre-finish line for the entire period of uniformity. Formaldehyde inputs for hours only partially with in a period of uniformity shall be calculated individually.]
  - vi. a statement indicating that the restrictions specified in item a. above have or have not been exceeded. If exceedance of these restrictions has occurred, the date, time, location, and cause of the exceedance shall be included. A statement outlining how each exceedance shall be avoided in the future shall also be submitted.

**STATE-ONLY REQUIREMENT**

**3. 15A NCAC 2Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS**

Pursuant to 15A NCAC 2Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.

- a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants."
- c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

<b>TPER Limitations</b>				
<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute systemic toxicants (lb/hr)</b>	<b>Acute irritants (lb/hr)</b>
Ammonia (7664-41-7)	----	----	----	0.68
Beryllium (7440-41-7)	0.28	----	----	----

<b>TPER Limitations</b>				
<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute systemic toxicants (lb/hr)</b>	<b>Acute irritants (lb/hr)</b>
Carbon disulfide (75-15-0)	----	3.9	----	----
Carbon tetrachloride (56-23-5)	460	----	----	----
Chlorobenzene (108-90-7)	----	46	----	----
Chloroform (67-66-3)	290	----	----	----
Ethylene glycol monoethyl ether (110-80-5)	----	2.5	0.48	----
n-Hexane (110-54-3)	----	23	----	----
Hydrogen chloride (7647-01-0)	----	----	----	0.18
Hydrogen cyanide (74-90-8)	----	2.9	0.28	----
Hydrogen fluoride (7664-39-3)	----	0.63	----	0.064
Manganese and compounds	----	0.63	----	----
Mercury, aryl & inorganic compounds	----	0.013	----	----
Mercury, vapor (7439-97-6)	----	0.013	----	----
Methyl chloroform (71-55-6)	----	250	----	64
Methylene chloride (75-09-2)	1,600	----	0.39	----
Pentachlorophenol (87-86-5)	----	0.063	0.0064	----
Perchloroethylene (127-18-4)	13,000	----	----	----
Polychlorinated biphenyls (1336-36-3)	5.6	----	----	----
Styrene (100-42-5)	----	----	2.7	----
Tetrachlorodibenzo-p- dioxin (1746-01-6)	0.00020	----	----	----
Trichloroethylene (79-01-6)	4000	----	----	----
Xylene (1330-20-7)	----	57	----	16.4

**STATE-ONLY REQUIREMENT****4. 15A NCAC 2D .0705: EXISTING SOURCES AND SIC CALLS**

In accordance with 15 A NCAC 2Q .0705(b), for sources at the facility subject to a MACT standard, excluding the MACT for combustion sources, a permit application shall be required demonstrating compliance with 15A NCAC 2D .1100 by the same deadline that the facility is required to comply with the last MACT. The permit application shall include an evaluation for all toxic air pollutants covered under rule 15A NCAC 2D .1104 for all the sources at the facility, excluding those sources exempt from evaluation under 15A NCAC 2Q .0702

**STATE-ONLY REQUIREMENT**

**5. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

- B. Finishing operations including:  
 lap coating line (ID No. ES-LL),  
 panel coating line (ID No. ES-PL),  
 prefinish coating line (ID No. ES-PF),  
 groove sealer spray booth (ID No. ES-SM), and  
 Trimboard Line with Cold Press (ID No. ES-TB-1)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	National Emission Standards for Hazardous Air pollutants from Surface Coating of Wood building Products	15A NCAC 2D.1111 40 CFR 63, Subpart QQQQ

**1. 15A NCAC 2D .1111 [40 CFR Part 63 Subpart QQQQ]:  
 NESHAP for Surface Coating of Wood Building Products**

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart QQQQ by May 28, 2006. [40 CFR 63.4683(b)]

**Compliance Option and Emission Limit**

- a. The Permittee must include all coatings, thinners, and cleaning materials used in the affected source when determining the organic HAP emission rate is equal to or less than the applicable emission limit of 0.06 lbs HAP/gal solids.
- b. The Permittee shall use the "compliant material option" to demonstrate that the organic HAP content of each coating used in the coating operations is less than or equal to the applicable emission limit in 2.2 B. 1. a, above and use no thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance. [40 CFR 63.4742(a)]

**Initial Compliance period**

- c. The initial compliance period began on May 28, 2006 and ended on the last day of the 12th month following the compliance date. [40 CFR 63.4683(b)]

**Demonstrate continuous compliance**

- d. For each compliance period to demonstrate continuous compliance, the Permittee must not use any coating for which the organic HAP content exceeds the emission limit in 2.2 B. 1. a., and use no thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in 2.2 B.1.c., above is the end of a compliance period consisting of that month and the preceding 11 months.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the HAP content exceeds the emission limit in 2.2 B.1.a., or the Permittee has used thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance.

**Reporting Requirement**

- e. The Permittee shall submit a semiannual compliance report and must contain the information specified below:
  - i. Company name and address.
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

- iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note - that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. Each compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.
- iv. Identification of the compliance option to meet the above emissions limit.
- v. If there were no deviations from the emission limits as mentioned above, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
- vi. If there was a deviation from the above emission limit for the compliant material option, the semiannual compliance report must contain the following information:
  - 1. Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.
  - 2. The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.4741) for each coating identified. The Permittee is not required to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
  - 3. The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified. The Permittee is not required to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).
  - 4. A statement of the cause of each deviation.

**Recordkeeping Requirement**

- f. The Permittee must keep a copy of each notification and report that was submitted to comply with this MACT and the documentation supporting each notification and report.
- g. The Permittee keep a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, the Permittee must keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- h. For each compliance period, the records as specified below:
  - i. A record of the coating operations at which each compliance option was used and the time periods (beginning and ending dates and times) this option was used.
  - ii. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.4741.
  - iii. A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.
- i. A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
- j. A record of the volume fraction of coating solids for each coating used during each compliance period.
- k. A record of the density for each coating used during each compliance period; and, if you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each thinner and cleaning material used during each compliance period.
- l. As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- m. The Permittee must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The Permittee may keep the records off-site for the remaining 3 years.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Permittee fails to report all the information in the compliance report in a timely manner and fails to keep all the records required.

### **SECTION 3 - GENERAL CONDITIONS (version 3.5)**

This section describes terms and conditions applicable to this Title V facility.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
  2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
  3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
  4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
  5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
  6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]
- The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.
- C. **Severability Clause** [15A NCAC 2Q .0508(i)(2)]
- In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.
- D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]
- Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:
- Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641
- All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).
- E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]
- The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. **Administrative Permit Amendments** [15A NCAC 2Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.

2. **Transfer in Ownership or Operation and Application Submittal Content** [15A NCAC 2Q .0524 and 2Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.

3. **Minor Permit Modifications** [15A NCAC 2Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.

4. **Significant Permit Modifications** [15A NCAC 2Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.

5. **Reopening for Cause** [15A NCAC 2Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. **Reporting Requirements**

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. Changes in the information submitted in the application;
- b. Changes that modify equipment or processes; or
- c. Changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. **Section 502(b)(10) Changes** [15A NCAC 2Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
  - i. the changes are not a modification under Title I of the Federal Clean Air Act;
  - ii. The changes do not cause the allowable emissions under the permit to be exceeded;
  - iii. The Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
  - iv. The Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
  - i. A description of the change;
  - ii. The date on which the change will occur;
  - iii. Any change in emissions; and
  - iv. Any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. **Off Permit Changes** [15A NCAC 2Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. The change affects only insignificant activities and the activities remain insignificant after the change; or
- b. The change is not covered under any applicable requirement.

4. **Emissions Trading** [15A NCAC 2Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum

achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

**I.A. Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

**“Excess Emissions”** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (*Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.*)

**“Deviations”** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

**Excess Emissions**

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. Notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - Name and location of the facility;
      - Nature and cause of the malfunction or breakdown;
      - Time when the malfunction or breakdown is first observed;
      - Expected duration; and
      - Estimated rate of emissions;
    - ii. Notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. Submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 2D .0535(f)(3).

**Permit Deviations**

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

**I.B. Other Requirements under 15A NCAC 2D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

**J. Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. The Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 2Q .0508(e) and 2Q .0513(b)]

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 2Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 2Q .0508(f) and 2Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. Whether compliance was continuous or intermittent; and
4. The method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. The power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. The liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. The applicable requirements under Title IV; or
  - d. The ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. The information contained in the application or presented in support thereof is determined to be incorrect;
2. The conditions under which the permit or permit renewal was granted have changed;
3. Violations of conditions contained in the permit have occurred;
4. The EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. The Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 2Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 2Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:

- a. Enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. Inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

**W. Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.

**X. Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

**Y. Confidential Information** [15A NCAC 2Q .0107 and 2Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

**Z. Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

**AA. Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

**BB. Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

**CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee 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.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall

be submitted to the EPA or its designee as required.

**DD. Prevention of Accidental Releases - Section 112(r)** [15A NCAC 2Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

**EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -  
FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

**FF. Title IV Allowances** [15A NCAC 2Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

**GG. Air Pollution Emergency Episode** [15A NCAC 2D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

**HH. Registration of Air Pollution Sources** [15A NCAC 2D .0200]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

**II. Ambient Air Quality Standards** [15A NCAC 2D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

**JJ. General Emissions Testing and Reporting Requirements** [15A NCAC 2Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 2D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

- a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
  - (1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
  - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
  - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 2D .2600 has precedence over all other tests.

**KK. Reopening for Cause** [15A NCAC 2Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
  - a. Additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. Additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. The Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. The Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 2Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

**LL. Reporting Requirements for Non-Operating Equipment** [15A NCAC 2Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

**MM. Fugitive Dust Control Requirement** [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

**NN. Specific Permit Modifications** [15A NCAC 2Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality

Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.

2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. A description of the change at the facility;
  - b. The date on which the change will occur;
  - c. Any change in emissions; and
  - d. Any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

**OO. Third Party Participation and EPA Review [15A NCAC 2Q .0521, .0522 and .0525(7)]**

For permits modifications subject to 45-day review by the federal Environment Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 2Q .0518 begins at the end of the 45-day EPA review period.

## ATTACHMENT

### List of Acronyms

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>CAIR</b>	Clean Air Interstate Rule
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound