

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
02248T19	02248T18	August ____ 2006	July 31, 2011

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, and to construct and operate, as outlined in Part II, 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:** **International Paper  
Armour Lumber Mill**

**Facility ID:** **2400125**

**Facility Site Location:** **361 Federal Road**  
**City, County, State, Zip:** **Riegelwood, Columbus County, North Carolina, 28456**

**Mailing Address:** **P.O. Box 57**  
**City, State, Zip:** **Riegelwood, Columbus County, North Carolina, 28456**

**Application Number:** **2400125.05B**  
**Complete Application Date:** **March 29, 2005**  
**Renewal Application Due Date:** **October 31, 2010**  
**Primary SIC Code:** **2421**  
**Division of Air Quality,**  
**Regional Office Address:** **Wilmington Regional Office**  
**127 Cardinal Drive**  
**Wilmington, North Carolina 28405**

Permit issued this the \_\_\_\_ day of August, 2006

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

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## PART I

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified.

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) and appurtenances listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

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

This 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
ES-BW-1 MACT	One wood-fired boiler (93 million Btu per hour maximum heat input)	CD-2	One venturi wet scrubber (350 gallons per minute minimum liquid injection rate):
		CD-3	One multicyclone (72 tubes, each nine inches in diameter)
ES-BW-2 PSD/NSPS/MACT	One wood-fired boiler (60 million Btu per hour maximum heat input)	CD-4	One electrostatic precipitator (ID No. CD-4)
		CD-5	One multicyclone (42 tubes, each nine inches in diameter)
ES-WW1	One woodwaste collection system	CD-A1-1	One simple cyclone (192 inches in diameter)
ES-WW2	one woodwaste collection system	CD-C1-1	One simple cyclone (96 inches in diameter)
ES-Fug-L1-1	Log debarking operation	N/A	N/A
ES-Fug-L1-2	log sawing operation	N/A	N/A
ES-K1-1, ES-K1-2, and ES-K1-3 MACT	Three steam heated lumber drying kilns	N/A	N/A
ES-K1-4, and ES-K1-5 PSD/MACT	Two steam heated high temperature lumber drying kilns	N/A	N/A

### 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. One wood-fired boiler without flyash re-injection (93 million Btu per hour design heat input, ID No. ES-BW-1, MACT) with associated multicyclone (ID No. CD-3) and venturi wet scrubber (ID No. CD-2)**

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.43 pounds per million Btu	15A NCAC 2D .0504
	Work practice standards	15A NCAC 2D .0614 <b>Compliance Assurance Monitoring</b>
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	See Section 2.2	15A NCAC 2D .1806
	<b>State-enforceable Only</b>	
Formaldehyde Acetaldehyde	See Section 2.2	15A NCAC 2D .1100
	<b>State-enforceable Only</b>	
Hazardous air pollutants	Operational Standards	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>
	(Compliance date is September 13, 2007)	

**1. 15A NCAC 2D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of wood that are discharged from this source into the atmosphere shall not exceed **0.43 pounds per million Btu heat input**. [15A NCAC 2D .0504]

**Testing** [15A NCAC 2D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with .0501(c)(3) and 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 .0504.

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

- c. Particulate matter emissions from boiler ID No. ES-BW-1 shall be controlled by a multicyclone (ID No. CD-3) and one wet venturi scrubber (ID No. CD-2). 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 are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. a monthly external visual inspection of the system ductwork, scrubber, and material collection unit for leaks;
  - ii. an annual internal inspection of the multicyclone's structural integrity,
  - iii. inspection of spray nozzles to detect clogging or corrosion damage of nozzles and perform maintenance and repair when necessary to assure proper operation of the scrubber;
  - iv. inspection, cleaning, and calibration of all associated instrumentation.
  - v. the performance of any maintenance and repair when necessary to assure proper operation of the multicyclone and scrubber.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the pressure drop and liquid flow rate is not maintained within the prescribed limits on the scrubber and the multicyclone, and ductwork are not inspected and maintained.

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

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

**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 multicyclone or scrubber.
- f. 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 by 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 .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source 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. [15A NCAC 2D .0516]

**Testing** [15A NCAC 2D .0501(c)(4) ]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 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, or reporting is required for sulfur dioxide emissions from the firing of wood in this boiler.

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

- a. Visible emissions from this boiler (ID No. ES-BW-1) 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 any six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 3. 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 day**, the Permittee shall observe the emission points of this source 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 sources 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: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 A. 3. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

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

**4. 15A NCAC 2D. 0614 “Compliance Assurance Monitoring” (CAM)**

- a. Per 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the following:
  - b. Background
    - i. Emission Unit  
One wood/bark-fired boiler with out fly ash re-injection (93 million Btu per hour heat input, ES-BW-1)
    - ii. Applicable Regulation, Emission Limit, and Monitoring Requirements.
      - (A) Regulations: 15A NCAC 2D .0521 and 15A NCAC 2D .0504
      - (B) Emission Limits: 20% Opacity and E = 0.43 lbs PM10 per million Btu heat input or (39.99 lbs PM10 per hour)
  - c. Control Technology: Multicyclone (ID No. CD-3) and wet venturi scrubber (ID No. CD-2)
  - d. **Monitoring Approach:** The key elements of the monitoring approach are presented in the following table.

Indicator Measurement Approach	Pressure Drop – Indicator #1 Pressure drop across multicyclone	Visible Emissions – Indicator #2 Visible emissions from scrubber
Indicator Range	An excursion is defined as a pressure drop greater than <u>4.8</u> inches of water or below <u>1.8</u> inches of water. If an excursion occurs, corrective action and/or preventative maintenance will be performed on the multicyclone.	An excursion is defined as a deviation from “normal” opacity. “Normal” opacity has already been determined via 30 days of daily observations following issuance of the initial Title V air permit. Should an apparent excursion occur, the Permittee may demonstrate compliance with opacity limits via EPA Reference Method 9 (40 CFR Part 60 Appendix A)
Verification of Operational Status	Pressure taps are located at the multicyclone inlet and outlet.	Observations are being made at the emission point (scrubber exhaust) during daylight hours when the boiler is in operation.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation using procedures that follow manufacturer’s specifications	Daily observation log or Method 9 report is required.
Monitoring Frequency	The boiler operator or observer reads the pressure gauge daily while the multicyclone is in operation.	Visible emissions observation is monitored daily
Data Collection Procedure	Pressure drop is recorded once per day.	Record results of reading once per day.
Averaging Period	N/A	N/A

e.. **Justification:**

- i. **Background.** The pollutant specific emissions control unit at this facility is one wood/bark-fired boiler, 93 million Btu per hour heat input
- ii. **Rationale for Selection of Performance Indicators and ranges.**  
Differential pressure (i.e. pressure drop) was selected as the 1<sup>st</sup> performance indicator because it is indicative of proper flue gas flow resistance and uniform flow distribution across the multicyclone collector tubes. When the multicyclone is operating properly, the pressure drop across the tubes creates a flow vortex in each cyclone. Centrifugal forces generated by the flow vortex cause particulate matter to migrate to the wall of each collection tube. When the flow vortex reverses direction at the base of each tube, particulate matter drops out of the vortex, falls into the multicyclone collection hopper, and is removed via an air lock valve and fly ash conveying system.

In general, the pressure drop across multicyclones increases in proportion to the square of flue gas flow rate; flow rate is a function of boiler heat load, combustion air flow rate, and flue gas temperature. The low end of the indicator range represents the expected pressure drop under minimum boiler load conditions. The high end of the range occurs at maximum boiler heat load.

Pressure drop readings above or below the specified range can indicate tube plugging, uneven flow distribution, or excessive tube wear. Instrument set points are established that allow for corrective action and maintenance prior to an excursion.

Visible emissions (opacity) were selected as the 2<sup>nd</sup> performance indicator because high opacity can indicate higher than allowable particulate emissions. Opacity is a rough predictor of particulate emissions, since it is a function of many other parameters, including particle size distribution, light path angle and distance, optical background, and particle optical properties.

However, significant changes in opacity can be a useful indicator pointing to possible multicyclone performance deficiencies. The opacity indicator limits coincide with emission limits in the existing air permit.

The 1<sup>st</sup> indicator range chosen for the multicyclone is 4.8 inches to 1.8 inches water column. An excursion triggers an inspection and corrective action. The pressure drop is recorded daily. As the pressure drop approaches the extremes of the indicator range, a mechanical measurement is taken to confirm the reading because plugging may cause inaccurate readings.

The 2<sup>nd</sup> selected indicator range is above normal opacity. Should an apparent excursion occur, the Permittee may demonstrate compliance with opacity limits via EPA Reference Method 9 (40 CFR Part 60 Appendix A). All excursions will be documented.

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

The Permittee shall submit a summary report of all monitoring 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 for the requirements of this permit must be clearly identified.

**5. 15A NCAC 2D .1111 “Maximum Achievable Control Technology, 40 CFR Part 63, Subpart DDDDD**

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 Part 63, Subpart DDDDD, “National Emissions Standards For Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” by **September 13, 2007** for existing wood-fired boiler (93 million Btu heat input capacity, ID No. ES-BW-1).

**B. One wood-fired boiler with flyash re-injection (60 million Btu per hour design heat input, ID No. ES-BW-2, NSPS, MACT, PSD) with associated electrostatic precipitator (ID No. CD-4) and one multicyclone (ID No. CD-5)**

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.38 pounds per million Btu heat input	15A NCAC 2D .0504
	0.03 pounds per million Btu heat input	15A NCAC 2D .0524 <b>40 CFR Part 60, Subpart Dc</b>
	0.025 pounds per million Btu heat input	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity except for one 6-minute period per hour of not more than 27% opacity	15A NCAC 2D .0524 <b>40 CFR Part 60, Subpart Dc</b>
	10 percent opacity (1-hour block average)	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>
Odorous emissions	See Section 2.2 <b>State-enforceable Only</b>	15A NCAC 2D .1806
Carbon monoxide	<b>BACT limit</b>	15A NCAC 2D .0530
	0.5 lbs CO per million Btu heat input	<b>PSD</b>
Volatile organic compounds	<b>BACT limit</b>	15A NCAC 2D .0530
	0.05 lbs VOCs per million Btu heat input	<b>PSD</b>
Nitrogen	<b>BACT limit</b>	15A NCAC 2D .0530
	0.30 lbs per million Btu heat input	<b>PSD</b>
Hydrogen chloride (HCL)	0.02 lbs per million Btu heat input	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>
Mercury (Hg)	0.000003 lbs per million Btu heat input	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>
Carbon monoxide	400 ppm by volume, on a dry basis corrected to 7% oxygen	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDDD</b>

**1. 15A NCAC 2D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of wood that are discharged from this source into the atmosphere shall not exceed **0.38 pounds per million Btu heat input**. [15A NCAC 2D .0504]

**Testing** [15A NCAC 2D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with and General Condition JJ in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

No monitoring, recordkeeping, or reporting is required for 15A NCAC 2D .0504. Monitoring, reporting, and recordkeeping shall be performed pursuant to 40 CFR Part 63, Subpart DDDDD.

**2. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS**

For the wood-fired boiler (ES-BW-2), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, 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 Dc, including Subpart A "General Provisions."

- a. **NSPS Reporting Requirements** - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
  - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
  - ii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date;
- b. **NSPS Emissions Limitations** - As required by 15A NCAC 2D .0524, the following permit limits shall not be exceeded:

Affected Facility	Pollutant	Emission Limit
Wood-fired boiler (ID No. ES-BW-2)	Particulate	0.03 lb/mmBtu
Wood-fired boiler (ID No. ES-BW-2)	Opacity	20% six minute average except for one 6-minute period per hour of not more than 27% opacity

- c. **NSPS Performance Testing** - As required by 15A NCAC 2D .0524, the following performance tests shall be conducted (ref: 40 CFR §60.45c (d), amended 2/27/2006):

Affected Facility	Pollutant	Test Method
Wood-fired boiler (ID No. ES-BW-2)	Particulate	Method 5
Wood-fired boiler (ID No. ES-BW-2)	Opacity	COMs

- i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR 60, Appendix A.
  - ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and reporting requirements.
  - iii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the initial start-up of the affected facility, the Permittee shall conduct the required performance test(s) and submit a written report of the test(s) to the Regional Supervisor, DAQ.
  - iv. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
  - v. All associated testing costs are the responsibility of the Permittee.
- d. **Monitoring Requirements** - Pursuant to 40 CFR 60.47c, the Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

- e. **Record keeping and Reporting Requirements** - Pursuant to the 40 CFR 60.48c, the following record keeping and reporting requirement apply:
  - i. Pursuant to 60.48c(a) the Permittee shall notification as provided in 60.7. This notification shall include the design heat input capacity and identification of fuels to be combusted in the affected facility.
  - ii. Pursuant to 60.48c(b), the Permittee shall submit the performance test data from the initial and any subsequent performance test and the performance evaluation of the COMs using the applicable performance specifications in appendix B.
  - iii. Pursuant to 60.48c(g), the Permittee shall record and maintain records of the amounts of each fuel combusted during each day.
  - iv. Pursuant to 60.48c(i) all records required under this subpart shall be maintained for a period of 5 years (changed from 2 years per applicant’s request) following the date of such record.

**3. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source 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. [15A NCAC 2D .0516]

**Testing** [15A NCAC 2D .0501(c)(4) ]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 3. 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, or reporting is required for sulfur dioxide emissions from the firing of wood in this boiler.

**4. 15A NCAC 2D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION**

Emission Source: wood fired boiler (60 mmBtu/hr, ID No. ES-BW-2)		
Pollutant	BACT Control	BACT limit
CO	Good Combustion Practices	0.5 lbs CO/mmBtu
NOx	Low NOx Burner	0.30 lbs NOx/mmBtu
VOCs	Good Combustion Practices	0.05 lbs VOCs/mmBtu

- a. Pursuant to 15A NCAC 2D .0530 “Prevention of Significant Deterioration” {40 CFR 51.166(j)} Best Available Control Technology Review (BACT), permitted emission limits for carbon monoxide, nitrogen dioxide, and volatile organic compounds listed in the table under 2.1 B. 4. above shall not be exceeded from boiler (**ID No. ES-BW-2**).

**Testing** [15A NCAC 2D .0501(c)]

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the carbon monoxide emission limit of 0.5 pounds per million Btu, nitrogen dioxide emission limit of 0.30 pounds per million Btu, and the volatile organic compound emission limit of 0.05 pounds per million Btu, by testing boiler (ID No. ES-BW-2) during the initial performance test. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Wilmington Regional Supervisor, Division of Air Quality for review and approval. All testing protocols must be approved by the Division of Air Quality prior to performing such tests. Testing must also be performed in accordance with General Condition JJ found in Section 3.

If the results of this test are above the BACT limits, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. Within 30 days after conducting the testing required under 2.1 B. 4. b. the Permittee shall submit a written report of the test results to the Wilmington Regional Office.

**5. 15A NCAC 2D .1111, 40 CFR Part 63, Subpart DDDDD: National Emission Standards For Industrial, Commercial, And Institutional Boilers And Process Heaters**

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111 “Maximum Achievable Control Technology” as promulgated in 40 CFR Part 63, Subpart DDDDD.

Boiler MACT for New wood fired boiler: (Under the **New Large Solid Fuel** Category)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-BW-2 MACT, Subpart DDDDD	One wood-fired boiler (60.0 million Btu per hour maximum heat input)	CD-4	Electrostatic precipitator
		CD-5	Multicyclone

**Table 1 - EMISSION LIMITS: (For New Large boiler – Solid Fuel Fired)**

Pollutant	Limit
Particulate matter (PM) or Total Selected Metals (TSM)	0.025 lbs PM/million Btu heat input or 0.0003 lbs TSM/ million Btu heat input
Hydrogen Chloride (HCl)	0.02 lbs/million Btu heat input
Mercury (Hg)	0.000003 lbs/million Btu heat input
Carbon Monoxide (CO)	400 ppm by volume on a dry basis @ 7% oxygen (3-run average)
Opacity	10 percent opacity (1-hr block average)

**a. Demonstration of compliance with CO emissions by performance test:**

The emission of CO shall not exceed the rate stated in Table 1 above. The Permittee demonstrating compliance with CO emissions using a performance test shall adhere to the following:

**General Requirements:**

- i. The Permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to 40 CFR § 63.6 (e)(3) [63.7505(e)];
- ii. The Permittee must maintain CO level below 400 ppm by volume on a dry basis @ 7% oxygen (3-run average) at all times from the boiler, except during periods of startup, shutdown, and malfunction [§63.7505(a)];
- iii. The boiler shall use an oxygen correction factor of 7 percent for CO;
- iv. Minimize emissions during periods of SSM according to 40 CFR § 63.6(e)(1)(i). [§63.7505(b)].

**Initial Requirements:**

- i. The Permittee must conduct initial performance tests and develop a site-specific test plan according to 40 CFR §63.7 (c), (d), (f), and (h). [§63.7520(a)]
- ii. To conduct an initial performance test for CO, the Permittee must: [§63.7510(c), Table 5 of subpart DDDDD]
  - (A) Select the sampling ports location and the number of traverse points using method 1 in appendix A of 40 CFR §60 or methods approved by DAQ;
  - (B) Determine oxygen and carbon dioxide concentrations of the stack gas utilizing method 3A or 3B in appendix A 40 CFR §60 or methods approved by DAQ;
  - (C) Measure the moisture content of the stack gas using method 4 in appendix A 40 CFR §60 or methods approved by DAQ;

**Continuous Compliance:**

- i. The Permittee must conduct annual performance tests for CO and follow the following procedures:  
[§63.7515(e)]
  - (A) Select the sampling ports location and the number of traverse points;
  - (B) Determine oxygen and carbon dioxide concentrations of the stack gas;
  - (C) Measure the moisture content of the stack gas;
  - (D) Measure the carbon monoxide emission concentration, and
  - (D) All the methods have to be approved by DAQ for all the above tests and methods.
- ii. Use 3-run averages during the annual CO performance test.
- iii. Complete test between 10 and 12 months after previous performance test, and [§63.7515(e)]
- iv. Operate according to the SSM plan during periods of SSM. [§63.7540(c)]

**Initial Notification:**

- i. The Permittee must submit all of the notifications in 40 CFR §§ 63.7(b) and (c), 40 CFR § 63.8 (e), (f)(4) and (6), and 40 CFR § 63.9 (b) through (h) that apply by the dates specified. [63.7545(a)]
- ii. The Permittee must submit an initial notification not later than 15 days of the startup of the boiler. [63.7545(c)]
- iii. The Permittee must submit a notification of intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [§63.7545(d)]

**Notification of Compliance Status** – [§63.7545(e) (1) thru (9) that applies]

- i. The Permittee must submit a Notification of Compliance Status (NOCS) as specified in 40 CFR § 63.9(h)(2)(ii). For each initial compliance test, the Permittee must submit the Notification of Compliance Status, including all performance test results before the close of business on the 60th day following the completion of the performance test according to 40 CFR §63.10(d)(2). The Notification of Compliance Status report must contain all the following information: [§63.7545(e) (1) thru (9) as applies]
  - (A) A description of the boiler including identification of the boiler subcategory, the boiler rating, a description of the control device on the boiler, description of the fuel burned, and justification for the fuel burned during the performance test. [§63.7545(e) (1)]
  - (B) Summary of the results of the performance tests and calculations conducted to demonstrate initial compliance including all established operating limits. [§63.7545(e) (2)]
  - (C) a signed certification that you have met all applicable emission limits for CO, [§63.7545(e) (6)]
  - (D) a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met the emission limit for CO, [§63.7545(e) (7)]
  - (E) If there was a deviation from any emission limit, the Permittee must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the notification of compliance status report and [63.7545(e) (9)]

**Semiannual Compliance Report:** - [Compliance report §63.7550 (e)]

- i. Unless DAQ has approved a different schedule for submission of reports the Permittee must submit a semiannual compliance 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. This report must include: [§63.7550(c) (1) thru (11) that applies]
- ii. Company name and address.
- iii. 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.
- iv. Date of report and beginning and ending dates of the reporting period.
- v. The total fuel used by the boiler for each calendar month within the semiannual reporting period.
- vi. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

- vii. A signed statement indicating that you burned no new types of fuel.

- viii. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information as per 40 CFR §63.10(d)(5)(i).
- ix. If there are no deviations from any emission limits, a statement that there were no deviations from the emission limits during the reporting period.

**b. Demonstration of compliance with emission of particulate matter (or TSM), HCl and Hg by performance test.**

The emission of these pollutants should not exceed the emission rate for each pollutant as stated above. The Permittee to demonstrate compliance with particulate matter (or TSM), HCl and Hg using performance test shall adhere to the following:

**General Requirements:**

- i. The Permittee to demonstrate compliance with any applicable emission limit through performance testing must develop a site-specific monitoring plan according to the following requirements: [§63.7505(d)]
  - (A) For each continuous monitoring system (CMS) [COMS is a part of CMS] required the Permittee must develop and submit to DAQ for approval a site-specific monitoring plan that addresses the requirements below. This plan must be submitted at least 60 days before your initial performance evaluation of your CMS. [§63.7505(d)(1)(i) thru (iii)]
    - (1). Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
    - (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
    - (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
- ii. The site-specific monitoring plan must also address: [63.7505(d)(2)(i) thru (iii)]
  - (A) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §63.8(c)(1), (c)(3), and (c)(4)(ii);
  - (B) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR § 63.8(d); and
  - (C) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR §63.10(c), (e)(1), and (e)(2)(i).
- iii. You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
- iv. You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
- v. The Permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to 40 CFR §63.6 (e)(3); [§63.7505(e)]
- vi. The Permittee must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction. [63.7505(a)]
- vii. The Permittee must always operate and maintain the boiler including air pollution control and monitoring equipment, according to 40 CFR §63.6(e)(1)(i).

**Testing Requirements:**

- i. To demonstrate compliance with emission of particulate matter (or TSM), HCl and Hg the Permittee shall follow the following methods and procedures: [63.7520]
  - (A) Use test methods listed in Table 5 of subpart DDDDD or methods approved by DAQ.
  - (B) Conduct performance tests according to 40 CFR § 63.7(c), (d), (f), and (h) under the specific conditions listed in Tables 5 subpart DDDDD. [63.7520(d)]
  - (C) Conduct performance test at the maximum normal operating load while burning the type of fuel that have the highest content of chlorine, mercury, and total selected metals. [§63.7520(d)]
  - (D) Conduct 3 separate test runs as specified in 40 CFR §63.7(e)(3). [63.7520(f)]
  - (E) Use F-Factor methodology in Method 19 to convert pollutant concentrations to pounds per MMBtu. [63.7520(g)]
  - (F) Demonstrate initial compliance based on these tests. (§63.7520(d)).

- (G) In order to use alternate monitoring procedures apply to DAQ for approval. [pg 18]
- (H) You must conduct all applicable performance tests initially, then annually, with the following exceptions: [§63.7515]
  - (1) If you demonstrate compliance with the applicable emission limits for any pollutant for three consecutive years, you can conduct performance tests every three years. However, if you do not meet an emission limit at any point in time, you must return to annual performance tests until you demonstrate compliance for three consecutive years. [63.7515(b)]
- ii. Establishing operating limits:
  - (A) The operating limit for control of particulate matter (or TSM) is to maintain opacity levels at or below 10% (1-hour block average) for the boiler.
  - (B) The operating limits to control Hg is to maintain opacity levels at or below 10% (1-hour block average) for the boiler.
- iii. To meet the applicable opacity operating limit the Permittee must install, operate, certify and maintain a Continuous Opacity Monitoring System (COMS) on the boiler according to the procedures below: [§63.7525(b)(1) to (7)]
  - (A) The COMS must be installed, operated, and maintained according to PS 1 of 40 CFR § 60, Appendix B.
  - (B) You must conduct a performance evaluation of the COMS according to the requirements in 40 CFR §63.8 and according to PS 1 of 40 CFR § 60, appendix B.
  - (C) As specified in 40 CFR §63.8(c)(4)(i), the COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
  - (D) The COMS data must be reduced as specified in 40 CFR §63.8(g)(2).
  - (E) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in 40 CFR § 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of the COMS.
  - (F) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of 40 CFR § 63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.
  - (G) You must determine and record all the 1- hour block averages collected for periods during which the COMS is not out of control.
- iv. The Permittee must report each instance in which you did not meet each emission limit, indicating those periods that occurred during periods of startup, shutdown, or malfunction. [§63.7540(b)].

**Records and Reports**

- i. Initial Notification [63.7545]
  - (A) The Permittee must submit all of the notifications in 40 CFR §63.7(b) and (c), 40 CFR §63.8 (e), (f)(4) and (6), and 40 CFR § 63.9 (b) through (h) that apply by the dates specified. [§63.7545(a)]
  - (B) The Permittee must submit an initial notification not later than 15 days of the startup of the boiler. [63.7545(c)]
  - (C) The Permittee must submit a notification of intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [63.7545(d)]
- ii. Notification of Compliance Status – [§63.7545(e)]
  - (A) Then Permittee must submit a Notification of Compliance Status (NOCS) as specified in 40 CFR §63.9(h)(2)(ii). For each initial compliance test, the Permittee you must submit the Notification of Compliance Status, including all performance test results before the close of business on the 60th day following the completion of the performance test according to 40 CFR § 63.10(d)(2). The Notification of Compliance Status report must contain all the following information: [§63.7545(e) (1) thru (9) as applies]
    - (1) A description of the boiler including identification of which subcategory the source is in, the boiler rating, a description of the control device on the boiler, description of the fuel burned, and

justification for the fuel burned during the performance test.

- (2) Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance including all established operating limits.
- (3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.
- (4) A signed certification that you have met all applicable emission limits.
- (5) If you had a deviation from any emission limit standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

iii. Semiannual Compliance Report: - [§63.7550]

Unless DAQ has approved a different schedule for submission of reports the Permittee must submit a semiannual compliance 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. This report must include: [63.7550(c) (1) thru (11) that applies]

- (A) Company name and address.
- (B) 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.
- (C) Date of report and beginning and ending dates of the reporting period.
- (D) The total fuel use by the boiler for each calendar month within the semiannual reporting period.
- (E) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.
- (F) A signed statement indicating that you burned no new types of fuel.
- (G) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in to 40 CFR § 63.10(d)(5)(i).
- (H) If there are no deviations from any emission limits, a statement that there were no deviations from the emission limits during the reporting period.
- (I) If there were no periods during which the COMS was out of control as specified in to 40 CFR § 63.8(c)(7), a statement that there were no periods during which the COMS was out of control during the reporting period.

iv. Records: [§63.7555]

You must keep the following records:

- (A) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40 CFR § 63.10(b)(2)(xiv).
- (B) The records as specified in 40 CFR §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (C) Records of performance tests or other compliance demonstrations, performance evaluations, and opacity observations as required in 40 CFR §63.10(b)(2)(viii).
- (D) For COMS, you must keep records of monitoring data for continuous opacity monitoring system during performance evaluation.
- (E) For COMS records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (F) You must keep records of monthly fuel used.

**c. Demonstration of compliance with emission of particulate matter (or TSM), HCl and Hg by Fuel Selection.**

The emission of these pollutants should not exceed the emission rate for each pollutant as stated above. The

Permittee to demonstrate compliance with particulate matter (or TSM), HCl and Hg using fuel selection and shall adhere to the following:

**General Requirements:**

- i. The Permittee to demonstrate compliance with any applicable emission limit through performance testing must develop a site-specific fuel analysis plan according to the following requirements: [§63.7521(b)]
  - (A) Develop and implement a written SSM plan according to §63.6(e) [§63.7505(e)]
  - (B) Calculate your emission rate according to §63.7530(d). If the calculated emission rate is below the applicable emission limit, demonstrate compliance with the applicable emission limit using fuel analysis. Otherwise, you must demonstrate compliance through performance testing §63.7505(c).
  - (C) Comply with emission limits at all times, except for periods of startup, shutdown, and malfunction (SSM) [§63.7505(a)].
  - (D) Minimize emissions during periods of SSM according to §63.6(e)(1) and §63.7505(a).

**Records and Reports:**

- i. Initial notification [§63.7521]
  - (A) Submit site-specific fuel analysis plan 60 days before you intend to demonstrate compliance §63.7521(b).
  - (B) Conduct fuel analysis for each type of fuel burned according to §63.7521.
  - (C) Demonstrate that you calculated maximum emission rate (based on fuel pollutant content) is below emission limit.
- ii. Continuous
  - (A) No annual performance test
  - (B) Maintain TSM, Cl, Hg fuel content at or below the limit established during the initial fuel analysis.
  - (C) Recalculate the metals, Cl, Hg content of fuel if you plan to burn a new fuel. [§63.7515(f) and §63.7540]
  - (D) Recalculate the metals, Cl, Hg content of each type of fuel every 5 years. [§7515(f)]
  - (E) Keep records of all fuels burned.
  - (F) Submit a semiannual compliance report.
- iii. Semiannual Compliance Report: - [§63.7550]

Unless DAQ has approved a different schedule for submission of reports the Permittee must submit a semiannual compliance 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. This report must include: [63.7550(c) (1) thru (11) that applies]

  - (A) Company name and address.
  - (B) 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.
  - (C) Date of report and beginning and ending dates of the reporting period.
  - (D) The total fuel use by the boiler for each calendar month within the semiannual reporting period.
  - (E) A signed statement indicating that you burned no new types of fuel.
  - (F) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 40 CFR § 63.10(d)(5)(i).
  - (G) If there are no deviations from any emission limits, a statement that there were no deviations from the emission limits during the reporting period.

- C. Woodworking operations including two woodwaste collection systems (ID Nos. ES-WW1 and ES-WW2) and associated cyclones (ID Nos. CD-A1-1 and CD-C1-1), one fugitive debarking operation (ID No. ES-Fug-L1-1), one fugitive log sawing operation (ID No. ES-Fug-L1-2), and two planer mills (ID No. ES-Plane-1)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odors	See Section 2.2.A. - <b>State-enforceable Only</b>	15A NCAC 2D .1806

**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 wood material collection systems (ID Nos. ES-WW1 and ES-WW2) shall be controlled by two cyclones. 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. monthly external inspection of the ductwork and cyclones noting the structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork and cyclones are not inspected and maintained.

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

- c. The results of all inspections and maintenance for the cyclones shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized DAQ representative upon request. The logbook 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.

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

- d. The Permittee shall submit the results of any maintenance performed on the 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 by 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 these woodworking operations (ID Nos. ES-WW1, ES-WW2, ES-Fug-L1-1, and ES-Fug-L1-2) 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 any six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.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 every six months**, the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 B.2.a above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized DAQ representative upon request. The logbook 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 by 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. Three steam heated lumber drying kilns (ID Nos. ES-K1-1, ES-K1-2, and ES-K1-3)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	See Section 2.2 <b>State-enforceable Only</b>	15A NCAC 2D .1806
Formaldehyde Acetaldehyde Phenol	See Section 2.2 <b>State-enforceable Only</b>	15A NCAC 2D .1100
Methyl ethyl ketone	See Section 2.2 <b>State-enforceable Only</b>	15A NCAC 2Q .0711
Hazardous air pollutants	Compliance date October 1, 2008 for existing kiln	15A NCAC 2D .1111 <b>40 CFR Part 63, Subpart DDDD</b>

**1. 15A NCAC 2D .1111, 40 CFR Part 63, Subpart DDDD: National Emission Standards for Hazardous Air Pollutants; Plywood and Composite Wood Products (PCWP)**

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 Part 63, Subpart DDDD, “National Emissions Standards For Hazardous Air Pollutants for “Plywood and Composite Wood Products” by **October 1, 2008** for existing Kilns 1, 2 and 3.

**E. Two steam heated lumber drying kilns (ID Nos. ES-K1-4, and ES-K1-5)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	See Multiple Emissions Section 2.2 <b>State-enforceable Only</b>	15A NCAC 2D .1806

<p>Volatile organic compounds</p>	<p>Less than 158 tons per year</p> <p><b>BACT Limits:</b> 3.15 pounds per thousand board feet of lumber dried (Annual emissions)</p> <p>3.97 pounds per thousand board feet of lumber dried each (Short term limit for testing compliance only)</p>	<p>15A NCAC 2D .0530 <b>PSD</b></p>
<p>Formaldehyde Acetaldehyde Phenol</p>	<p>See Multiple Emission Section 2.2</p> <p><b>State-Enforceable Only</b></p>	<p>15A NCAC 2D .1100</p>
<p>Methyl ethyl ketone</p>	<p>See Multiple Emissions Section 2.2</p> <p><b>State-Enforceable Only</b></p>	<p>15A NCAC 2Q .0711</p>
<p>Hazardous air pollutants</p>	<p>Notification requirements for new Kiln #5 only</p> <p>Compliance date of October 1, 2008 for existing Kiln #4</p>	<p>15A NCAC 2D .1111 <b>MACT, 40 CFR Subpart DDDD</b></p>

**1. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. Pursuant to 15A NCAC 2D .0530 “Prevention of Significant Deterioration”, the Permittee shall limit annual volatile organic compound emissions to **less than 158 tons per consecutive twelve month period** from lumber kilns ES-K1-4 and ES-K1-5.
- b. Pursuant to 15A NCAC 2D .0530 “Prevention of Significant Deterioration” {40 CFR 51.166(j) Best Available Control Technology Review (BACT)}, each lumber kiln (ES-K1-4) and (ES-K1-5) shall comply with the following BACT VOC limits:
  - i. 3.97 pounds per thousand board feet of lumber (short term testing limitation)
  - ii. 3.15 pounds per thousand board feet of lumber (long term testing limitation)

**Testing** [15A NCAC 2D .0501(c)(3)]

- c. If emissions testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the average of the results of this test are above the limit given in Section 2.1. E. 1. b., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

**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 lumber dried in the kilns (ID Nos. ES-K1-4 and ES-K1-5) each month by an emission factor of 3.15 pounds of VOC emissions per thousand board feet of lumber dried. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions exceed the limit given in Section 2.1. E. 1. a. above.
- e. The amount of lumber dried in the kilns (ID Nos. ES-K1-4 and ES-K1-5), the calculations, and the amount of VOC emissions from the each kiln (ID Nos. ES-K1-4 and ES-K1-5) shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the amounts of lumber dried and VOC’s emitted are not monitored and recorded.

**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 and on or before July 30 of each calendar year for the preceding six-month period. The report shall contain the following:

- i. The monthly volatile organic compound emissions from kilns (ES-K1-4 and ES-K1-5) for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
- ii. The monthly quantities of lumber dried for the previous 17 months; and
- iii. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D. 1111, 40 CFR Part 63, Subpart DDDD: National Emission Standards for Hazardous Air Pollutants; Plywood and Composite Wood Products (PCWP)**

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111 “Maximum Achievable Control Technology” as promulgated in

a. **40 CFR Part 63 Subpart A “GENERAL PROVISIONS”**

The Permittee shall comply with the requirements of 40 CFR, §63 Subpart A “General Provisions” according to the applicability of Subpart A to **lumber drying kilns** as identified in 40 CFR Part 63, Subpart DDDD, §63.2231.

**Compliance dates** [40 CFR Part 63, §63.1945]

- b. Lumber kiln (ID No. ES-K1-5) shall be in compliance with this regulation upon initial startup. [40 CFR §63.2233(a)(2)]

**Monitoring/Recordkeeping/Reporting**

- c. The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required must provide the following information in writing to the Administrator and the DAQ:
  - i. A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction [Ref: §63.9(b)(4)(i)],
  - ii. A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date [Ref: §63.9(b)(4)(v)].
  - iii. The applicant shall submit an initial notification to the DAQ and the EPA Region IV, no later than 120 days after the initial startup of lumber kiln (ID No. ES-K1-5). [Ref: §63.2280]
  - iv. Keep records and reports for a period of 5 years on-site following the date of occurrence **or** records can be maintained on site for 2 years after each recording and can be maintained off-site for the remaining 3 years. [Ref: §63.2283]

**3. 15A NCAC 2D .1111, 40 CFR Part 63, Subpart DDDD: National Emission Standards for Hazardous Air Pollutants; Plywood and Composite Wood Products (PCWP)**

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 Part 63, Subpart DDDD, “National Emissions Standards For Hazardous Air Pollutants for “Plywood and Composite Wood Products” by **October 1, 2008 for existing Kiln #4.**

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

### A. All emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	Odorous emissions must be controlled <b>State-enforceable Only</b>	15A NCAC 2D .1806
Methyl ethyl ketone	78 pounds per day 22.4 pounds per hour <b>State-enforceable Only</b>	15A NCAC 2Q .0711
Phenol	0.963 lbs per hour <b>State-enforceable Only</b>	15A NCAC 2D .1100
Acetaldehyde	0.75 lbs per hour <b>State-enforceable Only</b>	15A NCAC 2D .1100
Formaldehyde	1.36 lbs per hour <b>State-enforceable Only</b>	15A NCAC 2D .1100

#### State Only Requirement

**1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not cause, allow, or permit the emission sources to be operated without employing suitable measures for the control of odorous emissions.

#### State Only Requirement

**2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT**

Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limit
Emission from the five lumber drying kilns (ES-K1-1 through ES-K1-5)	Formaldehyde	1.36 pounds per hour
	Acetaldehyde	0.75 pounds per hour
	Phenol	0.963 lbs per hour

- a. To ensure compliance with the above limits, the Permittee shall maintain records of the process operational information as necessary to demonstrate compliance with the specified pollutant emission limits.

#### State Only Requirement

**3. 15A NCAC 2Q .0705: EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT**

- a. As of **June 14, 2006** emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.
- b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 2Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.
- c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 2Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".

- d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711.
- e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Emission Source	Toxic Air Pollutant	Emission Limit
Facility wide emission sources	Methyl ethyl ketone (78-93-3)	78 pounds per day 22.4 pounds per hour

### SECTION 3 - GENERAL CONDITIONS

This section describes terms and conditions applicable to this Title V facility. All references to the “permit” in this section apply only to Part I of the permit.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(aa)]
  - 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(aa)]
 

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)]
 

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(c)]
 

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

E. **Duty to Comply** [15A NCAC 2Q .0508(j)]

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. 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.

2. 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.

3. 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 on the next business day after becoming aware of the deviation. A written report shall be submitted within two business days to the Regional Supervisor and shall include the probable cause of such deviation and any corrective actions or preventative actions taken. All reports of deviations from permit requirements shall be certified by a responsible official.

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

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 the 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 .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(k)]

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(n)]

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)]

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(t)]

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(m)]

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(r) 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(o)]

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(n)]

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(g)]

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(h)]

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(e)]

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(aa)]

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
  - a. a certification of the test results by sampling team leader and facility representative;
  - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
  - c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
  - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
  - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
  - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

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(f)]

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.

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>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>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>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

## PART II

The Permittee is hereby authorized to construct air emission source(s) and associated air pollution control device(s) and appurtenances listed in Section 1, Part II of this permit, in accordance with the completed air quality permit application No. 2400125.03A, received July 10, 2003, including all plans, specifications, previous applications, and other supporting data, all of which are filed with the DAQ and are incorporated in Part II of this Air Quality Permit.

### 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:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-BW-2 PSD/NSPS/MACT	One wood fired boiler (60 million Btu per hour maximum heat input)	CD-4	One electrostatic precipitator
		CD-5	One multicyclone (42 tubes, each nine inches in diameter)
ES-K1-4 ES-K1-5 PSD/MACT	Two steam heated lumber drying kilns	N/A	N/A

### SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) and appurtenances listed in Section 1 are subject to the following specific terms, conditions, and limitations, including the monitoring, recordkeeping, and reporting requirements as specified herein:

1. Any air emission sources or control devices authorized to construct in Section 1 must be constructed and maintained in accordance with the provisions contained herein and operated in accordance with provisions contained in Part I of this permit. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A NCAC, Subchapter 2D .0504, .0516, .0521, .0524 (NSPS Subpart Dc), .0530, .1111 (MACTs, Subpart DDDD and DDDDD), .1100, 2Q .0701(c), and 2Q .0711.
2. **NOTIFICATION REQUIREMENT** - This permit may be revoked unless the emission source(s) and associated air pollution control device(s) listed in Section 1 are constructed in accordance with the approved plans, specifications, and other supporting data. Within 15 days after start up of the new or modified facilities, the Permittee shall provide **written notice** of the start up to the Regional Supervisor, DAQ.

### SECTION 3: GENERAL CONDITIONS:

This section describes terms and conditions applicable to the construction of the air emission source(s) and associated air pollution control device(s) listed in Section 1. Unless otherwise specified herein all references to the "permit" in this section apply only to Part II of the permit.

- A. **Operating Conditions**  
All operating conditions for the air emission source(s) and associated air pollution control device(s) listed in Section 1 are under Part I of this permit.
- B. **General Provisions**
  1. This permit is nontransferable by the Permittee. Future owners and operators must obtain a new Air Quality Permit from the DAQ.
  2. This issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of state law which have occurred prior to the issuance date of this permit.
  3. A violation of any term or condition of Part II of this permit shall subject the Permittee to enforcement pursuant to NCGS 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
- C. **Submissions (reports, test data, monitoring data, notifications, and requests for renewal)**

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.

D. **Part II Renewal Request**

The Permittee shall request renewal of the emission source(s) and associated air pollution control device(s) listed in Section 1 at the same time as specified in Part I, Section 3 - General Condition K of this permit.

E. **Annual Fee Payment**

The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200 and in conjunction with Part I, Section 3 - General Condition W of this Air Quality Permit.

F. **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:

1. changes in the information submitted in the application;
2. changes that modify equipment or processes; or
3. 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.

G. **Termination, Modification, and Revocation of the Permit**

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; or
4. 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.

H. **Inspection and Entry**

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:

1. 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;
2. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
3. 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
4. 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.

I. **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.

