



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

Beverly Eaves Perdue
Governor

Sheila C. Holman
Director

Dee Freeman
Secretary

November ?, 2011

Mr. Peter Provencher
Plant Manager
West Fraser, Inc. - Armour Lumber Mill
P.O. Box 57
361 Federal Road
Riegelwood, North Carolina 28456

SUBJECT: Air Quality Permit No. 02248T24
Facility ID: 2400125
West Fraser, Inc. - Armour Lumber Mill
Riegelwood, Columbus County, North Carolina
Fee Class: Title V

Dear Mr. Provencher:

In accordance with your Air Quality Permit Application for a permit renewal received October 28, 2010, we are forwarding herewith Air Quality Permit No. 02248T24 to West Fraser, Inc. - Armour Lumber Mill in Riegelwood, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for

Permitting Section
1641 Mail Service Center, Raleigh, North Carolina 27699-1641
2728 Capital Blvd., Raleigh, NC 27604
Phone: 919-715-6237 \ FAX: 919-733-5317 \ Internet: www.daq.state.nc.us

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Mr. Provencher
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requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

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

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

This Air Quality Permit shall be effective from November X, 2011 until October 31, 2016, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Jenny Kelvington, P.E. at (919) 715-6254.

Sincerely yours,

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

cc: Gregg Worley, EPA Region 4
Wilmington Regional Office
Central Files

**ATTACHMENT I:
Insignificant Activities per 15A NCAC 2Q .0503(8)**

| Emission Source ID No. | Emission Source Description |
|---|---|
| I-Roads | Haul Roads |
| IES-GTS-1 | 1,000 gallon above ground gasoline storage tank |
| IES-DST-1 | 10,000 gallon above ground diesel storage tank |
| IES-UOST-1 | 1,000 gallon above ground used oil storage tank |
| IF-DD-1 | Small drum debarker |
| IF-S-1 | Hold tech saw |
| IF-SB-1 | Shavings bin |
| IF-TB | Top loading truck bin |
| IES-Fug-L1-2 | Log sawing operation |
| IES-FP-1 GACT Subpart ZZZZ | Diesel-fired emergency fire water pump (185 BHp) |
| IES-EG-1 GACT Subpart ZZZZ | Diesel-fired emergency generator (166 BHp) |

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

ATTACHMENT II:**Table of Changes to Permit No. 02248T23:**

| Page(s) | Section | Description of Change(s) |
|----------------|-------------------------------|--|
| N/A | Insignificant Activities List | Moved the log sawing operation (IES-Fug-L1-2) to the list of insignificant activities; and Added one existing diesel-fired fire water pump (IES-FP-1), one existing emergency generator (IES-EG-1), and one 1,000 gallon above ground used oil storage tank (IES-UOST-1) to the list of insignificant activities. |
| 1 | Permit Cover Page | Amended permit revision numbers and issuance/effective dates. |
| 3 | List of Permitted Sources | Removed wood-fired boiler ES-BW-2, lumber drying kiln ES-K1-5, and fugitive log sawing operation (ID No. ES-Fug-L1-2). |
| 4 | 2.1.A.1 | Added particulate stack test requirement for the wood-fired boiler; and Removed the annual internal inspection of the structural integrity of the multicyclone and the monitoring of the differential pressure across the multicyclone. |
| 5 - 6 | 2.1.A.4 | Added a condition that CAM applies until the initial compliance date of May 16, 2014 for the Case-By-Case MACT specified in Condition 2.1.A.5.a; and Removed the pressure differential across the multicyclone as an indicator for CAM. |
| 9 | 2.1.B.2.c | Increased the VE monitoring frequency from every six months to every month. |
| 10 - 11 | 2.1.C | Combined the four lumber kilns under one section; Reverted back to the 1997 established BACT limits for the low-temperature kiln (ID No. ES-K1-4);and Added the 2D .1100 requirements as 2.1.C.2 of this section. |
| 13-21 | 3.0 | Updated General Conditions to Version 3.5. |

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 |
|------------|---------------------|------------------|------------------|
| 02248T24 | 02248T23 | November X, 2011 | October 31, 2016 |

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

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

Permittee: **West Fraser, Inc. 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: **2400125.10B**
Complete Application Date: **October 28, 2010**

Primary SIC Code: **2421**
Division of Air Quality, **Wilmington Regional Office**
Regional Office Address: **127 Cardinal Drive**
Wilmington, North Carolina 28405

Permit issued this the Xth of November, 2011

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

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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 Case-By-Case MACT | wood-fired boiler (104.336 million Btu per hour maximum heat input) | CD-3 CD-2 | multicyclone (72 tubes, each nine inches in diameter) venting to venturi wet scrubber (350 gallons per minute minimum liquid injection rate, based on a 3-hour average) |
| ES-WW1 | woodwaste collection system | CD-A1-1 | simple cyclone (192 inches in diameter) |
| ES-WW2 | woodwaste collection system | CD-C1-1 | simple cyclone (96 inches in diameter) |
| ES-Fug-L1-1 | Log debarking operation | N/A | N/A |
| ES-K1-1 ES-K1-2, and ES-K1-3 MACT DDDD | Three steam heated lumber drying kilns | N/A | N/A |
| ES-K1-4 PSD, MACT DDDD | One steam heated, high temperature lumber drying kiln | 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. Wood-fired boiler without flyash re-injection (104.336 million Btu per hour heat input, ID No. ES-BW-1) with multicyclone (ID No. CD-3) and venturi wet scrubber (ID No. CD-2)

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|--|---|
| Particulate matter | 0.41 pounds per million Btu | 15A NCAC 2D .0504 |
| | Work practice standards | 15A NCAC 2D .0614 Compliance Assurance Monitoring |
| Sulfur dioxide | 2.3 pounds per million Btu | 15A NCAC 2D .0516 |
| Visible emissions | 20 percent opacity | 15A NCAC 2D .0521 |
| Total Selected Metals Mercury HCl-Equivalent Carbon Monoxide | 0.0003 lbs/mmBtu 5.0e-06 lbs/mmBtu 188.5 lbs/hr 834 ppmvd & 7% O ₂ | 15A NCAC 2D .1109 |
| Odorous emissions | See Section 2.2 State-enforceable Only | 15A NCAC 2D .1806 |

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 **0.41 pounds per million Btu heat input**. [15A NCAC 2D .0504]

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

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

- c. Under the provisions of NCGS 143.215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the source (**ID No. ES-BW-1**) for particulate matter following a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 – General Condition JJ. Testing shall be completed by **November 12, 2014** and the results submitted by **December 12, 2014** unless an alternative date is approved by the DAQ. If the results of this test are above the limits 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)]

- d. Particulate matter emissions from boiler (**ID No. ES-BW-1**) shall be controlled by a multicyclone (**ID No. CD-3**) and 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, **multicyclone**, scrubber, and material collection unit for leaks;
- ii. 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;
- iii. Inspection, cleaning, and calibration of all associated instrumentation; **and**
- iv. 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 multicyclone, scrubber, and ductwork are not inspected and maintained.

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

- e. 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.

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

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

- f. 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.
- g. 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.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in

Section 3. If the results of this test are above the limit given in Section 2.1 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.

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. 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 source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) is below the limit given in Section 2.1 A.3. a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 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.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not created and retained.

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”

- a. Per 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the following **compliance assurance monitoring (CAM) until the initial compliance date of May 16, 2014 for the Case-By-Case MACT specified in Condition 2.1.A.5.a:**
- b. **Background**
 - i. **Emission Unit**
wood/bark-fired boiler with out fly ash re-injection (104.336 million Btu per hour heat input) (**ID No. 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 = 0.41 lbs PM per million Btu heat input or (42.78 lbs PM 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 | Indicator - Visible emissions from scrubber |
|------------------------------------|--|
| Indicator Range | 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 60, Appendix A) |
| Verification of Operational Status | Observations are being made at the emission point (scrubber exhaust) during daylight hours when the boiler is in operation. |
| QA/QC Practices and Criteria | Daily observation log or Method 9 report is required. |
| Monitoring Frequency | Visible emissions observation is monitored daily |
| Data Collection Procedure | Record results of reading once per day. |
| Averaging Period | N/A |

- e. **Justification:**
 - i. **Background.** The pollutant specific emissions control unit at this facility is one wood/bark-fired boiler with out fly ash re-injection (104.336 million Btu per hour heat input, **ID No. ES-BW-1**)
 - ii. **Rationale for Selection of Performance Indicator and Range**
Visible emissions (opacity) were selected as the performance indicator because high opacity can indicate higher than allowable particulate emissions. Opacity is a rough predictor of particulate emission 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 or scrubber performance deficiencies. The opacity indicator range is “above normal” opacity. Should an apparent excursion occur, the Permittee may demonstrate compliance with opacity limits following EPA Reference Method 9 (40 CFR Part 60 Appendix A). All excursions shall 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 .1109: Case-by-Case MACT

- a. Emissions from this source (**ID No. ES-BW-1**) shall not exceed the emissions limits listed below:
 - i. **Total Selected Metals (TSM):** 0.0003 lbs/mmBtu. TSM is defined as the following: arsenic, beryllium, cadmium, chromium, lead, nickel, selenium. [Manganese shall not be included in the determination of TSM.]
 - ii. **Mercury (Hg):** 5e-06 lbs/mmBtu
 - iii. **Hydrogen Chloride-equivalent (HCl):** 188.5 lbs/hr. HCl-equivalent is defined by the following equation:

$$E = E_{HCl} + E_{Cl2} * (RfC_{HCl} / RfC_{Cl2})$$

Where:

- E = HCl-equivlent emission rate (in lbs/hr)
- E_{HCl} = HCl emission rate (in lbs/hr);
- E_{Cl₂} = Cl₂ emission rate (in lbs/hr);
- RfC_{HCl} = Reference concentration for HCl (20 µg/m³); and
- RfC_{Cl₂} = Reference concentration for Cl₂ (0.20 µg/m³).

- iv. **Carbon Monoxide (CO):** 834 ppmvd, corrected to 7% oxygen

The initial compliance date for these emission limitations and associated monitoring, recordkeeping, and reporting requirements is **May 16, 2014**. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 2D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

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

- b. The Permittee shall conduct compliance tests for each pollutant listed in Section 2.1 A.5.a. above. The Permittee may choose either of the following methods for the compliance tests:
- i. **Stack Testing**. Stack testing shall be performed in accordance with General Condition JJ in Section 3 of this permit. Tests may not be conducted during periods of startup, shutdown, or malfunction. Stack tests shall be conducted biennially. Following the initial stack test, each test shall be conducted between 22 and 26 months after the previous stack test.
 - ii. **Fuel Analysis**. The Permittee may use a fuel analysis to demonstrate compliance with the TSM, mercury, and/or HCl-equivalent standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 A.5.a., the Permittee shall conduct a follow-up stack test of the affected sources within 90 days of the fuel analyses. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109.

The initial compliance test shall be conducted within 180 days of the initial compliance date. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.1 A.5.a. above.

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

- c. The Permittee shall conduct monthly and annual inspections of the multicyclone (**ID No. CD-3**) and record the results of inspections as provided in Section 2.1 A.1.c. and d. of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these inspections are not performed or the required records are not created and maintained.

Operating Limits [15A NCAC 2Q .0508(f)]

- d. The Permittee shall maintain the 12-hour block average pressure drop at the wet scrubber (**ID No. CD-2**) at or above the lowest 1-hour average pressure drop measured during the most recent performance test.

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

- e. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record the pressure drop at the wet scrubber (**ID No. CD-2**).
- i. The monitors must complete a minimum of one cycle of operation for each successive 15-minute period. The monitors must record a minimum of four successive cycles of operation to have a valid hour of data.
 - ii. For the purposes of calculating data averages, do not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required QA/QC activities.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the required monitoring is not conducted, or if the monitored operating parameters exceed the minimum limits established pursuant to Section 2.1 A.5.d. above.

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

- f. Maintain a copy of each notification and report required by this standard, including all documentation supporting any Notification of Compliance Status. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if it fails to comply with the recordkeeping requirements
- g. Maintain records of performance tests and fuel analyses. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if it fails to comply with the recordkeeping requirements.
- h. For each required CMS, maintain the following records:
- i. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - ii. A record of each period during which a CMS is malfunctioning or inoperative (including out-of-control

- periods);
- iii. All CMS calibration checks; and,
- iv. All adjustments and maintenance performed on CMS.

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

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

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

B. Woodworking operations including two wood material collection systems (ID Nos. ES-WW1 and ES-WW2) and associated cyclones (ID Nos. CD-A1-1 and CD-C1-1) and fugitive debarking operation (ID No. ES-Fug-L1-1)

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. - State-enforceable Only | 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 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.

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

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, and ES-Fug-L1-1**) 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.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 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 each month**, the Permittee shall observe the emission points of woodworking operations for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) is below the limit given in Section 2.1 B.2.a. above.

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

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

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.

C. Four steam heated lumber drying kilns (ID Nos. ES-K1-1, ES-K1-2, ES-K1-3, and ES-K1-4)

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

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---------------------|------------------|-----------------------|
|---------------------|------------------|-----------------------|

| | | |
|----------------------------|--|---|
| Volatile organic compounds | BACT Limits For Kiln ES-K1-4 Only: 94.26 tons per consecutive 12-month period 5.73 pounds per thousand board feet of lumber dried | 15A NCAC 2D .0530 PSD |
| Acrolein | 0.5 lbs per hour State-enforceable Only | 15A NCAC 2D .1100 |
| Formaldehyde | 1.36 lbs per hour State-enforceable only | |
| Phenol | 0.963 lbs per hour State-enforceable only | |
| Hazardous air pollutants | Plywood and Composite Wood Products Manufacturing MACT No applicable requirements other than initial notification. | 15A NCAC 2D .1111 MACT 40 CFR Part 63, Subpart DDDD |
| Odors | See Section 2.2 State-enforceable Only | 15A NCAC 2D .1806 |
| Acetaldehyde | See Section 2.2 State-enforceable Only | 15A NCAC 2Q .0705 |

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

- a. The Permittee shall comply with the PSD Final Determination by the Division of Air Quality dated March 11, 1997. Pursuant to 15A NCAC 2D .0530 “Prevention of Significant Deterioration” {40 CFR 51.166(j) Best Available Control Technology Review (BACT)} and the PSD, Final Determination, the Permittee shall comply with the following BACT limits for lumber kiln (ID No. ES-K1-4):
 - i. **5.73 pounds of volatile organic compound (VOC) emissions per thousand board feet of lumber**
 - ii. **94.26 tons of volatile organic compound (VOC) emissions per consecutive 12-month period.**

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

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

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

- c. 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 kiln (ID No. ES-K1-4) each month by the emission factor listed on the NC DAQ spreadsheet¹ for lumber drying kilns or an approved site specific emission factor. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions exceed the limit given in Section 2.1. C. 1. a. ii above.
- d. The amount of lumber dried in the kiln (ID No. ES-K1-4), the calculations, and the amount of VOC emissions from the kiln (ID Nos. ES-K1-4) 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 VOCs emitted are not monitored and recorded.

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

- e. 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:

¹ The DAQ spreadsheet is located at <http://daq.state.nc.us/permits/spreadsheets/>. The current version entitled “Wood Kiln Emissions Calculator Revision C July 2007” has a VOC emission factor of 4.09 lbs per thousand board feet for steam heated kilns.

- i. The monthly volatile organic compound emissions from kiln (ID Nos. ES-K1-4) 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.

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 four lumber drying kilns (ID Nos. ES-K1-1 through ES-K1-4) | Acrolein | 0.50 pounds per hour |
| | Formaldehyde | 1.36 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.

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 State-enforceable Only | 15A NCAC 2D .1806 |
| Acetaldehyde | 6.80 lbs per hour State-enforceable Only | 15A NCAC 2Q .0705 |

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. 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 | Acetaldehyde | 6.80 pounds per hour |

SECTION 3 - GENERAL CONDITIONS (Version 3.5; 08/15/11)

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

A. General Provisions [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. Permit Availability [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.

C. Severability Clause [15A NCAC 2Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. Submissions [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

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

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Permit Modifications**

1. **Administrative Permit Amendments** [15A NCAC 2Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.
2. **Transfer in Ownership or Operation and Application Submittal Content** [15A NCAC 2Q .0524 and 2Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.
3. **Minor Permit Modifications** [15A NCAC 2Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.
4. **Significant Permit Modifications** [15A NCAC 2Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.
5. **Reopening for Cause** [15A NCAC 2Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. **Reporting Requirements**
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. Changes in the information submitted in the application;
 - b. Changes that modify equipment or processes; or
 - c. Changes in the quantity or quality of materials processed.If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. **Section 502(b)(10) Changes** [15A NCAC 2Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. The changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. The changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. The Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. The Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. A description of the change;
 - ii. The date on which the change will occur;
 - iii. Any change in emissions; and
 - iv. Any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. **Off Permit Changes** [15A NCAC 2Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. The change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. The change is not covered under any applicable requirement.
4. **Emissions Trading** [15A NCAC 2Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

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

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

Excess Emissions

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

Permit Deviations

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

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

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

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.
- K. **Permit Renewal** [15A NCAC 2Q .0508(e) and 2Q .0513(b)]
This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.
- L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- M. **Duty to Provide Information (submittal of information)** [15A NCAC 2Q .0508(i)(9)]
 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.
- N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.
- O. **Retention of Records** [15A NCAC 2Q .0508(f) and 2Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.
- P. **Compliance Certification** [15A NCAC 2Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. Enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. Inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. Sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. Annual permit fee payments shall refer to the permit number.
 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.
- X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.
- Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.
- Z. **Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.
- AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.
- BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.
- CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.
- DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 2Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
- EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -**
FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

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

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

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

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

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

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

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

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

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

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 2D.

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - (1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 2D .2600 has precedence over all other tests.

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

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

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

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

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

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

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

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

1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. A description of the change at the facility;
 - b. The date on which the change will occur;
 - c. Any change in emissions; and
 - d. Any permit term or condition that is no longer applicable as a result of the change.

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

ATTACHMENT

List of Acronyms

| | |
|------------------------|--|
| AOS | Alternate Operating Scenario |
| BACT | Best Available Control Technology |
| Btu | British thermal unit |
| CAA | Clean Air Act |
| CAIR | Clean Air Interstate Rule |
| CEM | Continuous Emission Monitor |
| CFR | Code of Federal Regulations |
| DAQ | Division of Air Quality |
| DENR | Department of Environment and Natural Resources |
| EMC | Environmental Management Commission |
| EPA | Environmental Protection Agency |
| FR | Federal Register |
| GACT | Generally Available Control Technology |
| HAP | Hazardous Air Pollutant |
| MACT | Maximum Achievable Control Technology |
| NAA | Non-Attainment Area |
| NCAC | North Carolina Administrative Code |
| NCGS | North Carolina General Statutes |
| NESHAPS | National Emission Standards for Hazardous Air Pollutants |
| NO_x | Nitrogen Oxides |
| NSPS | New Source Performance Standard |
| OAH | Office of Administrative Hearings |
| PM | Particulate Matter |
| PM₁₀ | Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less |
| POS | Primary Operating Scenario |
| PSD | Prevention of Significant Deterioration |
| RACT | Reasonably Available Control Technology |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| SO₂ | Sulfur Dioxide |
| tpy | Tons Per Year |
| VOC | Volatile Organic Compound |