



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
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MICHAEL A. ABRACZINSKAS  
*Director*

**XX XX, 201X**

Mr. Robert Van Ells  
Plant Manager  
Craven County Wood Energy, L.P.  
201 Executive Parkway  
New Bern, North Carolina 28562

**SUBJECT: Air Quality Permit No. 064919T25  
Facility ID: 2500158  
Craven County Wood Energy, L.P.  
New Bern, North Carolina  
Craven County  
Fee Class: Title V  
PSD Status: Major**

Dear Mr. Van Ells:

In accordance with your completed Air Quality Permit Applications for a Significant modification of a Title V permit received September 26, 2017, we are forwarding herewith Air Quality Permit No. 064919T25 to Craven County Wood Energy, L.P., 201 Executive Parkway, New Bern, 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 02Q .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 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 NCGS 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 NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Craven County has triggered increment tracking under PSD for PM-10, SO<sub>2</sub>, and NO<sub>x</sub>. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XX XX, 20XX until August 31, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Please note the attached summary table, which outlines the changes made to the permit. Should you have any questions concerning this matter, please contact Mr. Jeff Twisdale by email at [jeff.twisdale@ncdenr.gov](mailto:jeff.twisdale@ncdenr.gov) or by telephone at (919) 707-8472.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NC DEQ

Enclosure

c: Heather Ceron, EPA  
Washington Regional Office  
Connie Horne, cover letter only  
Central Files

**Table of modifications to Permit No. 06419T24**

<b>Old Page(s)</b>	<b>New Page(s)</b>	<b>Condition/ Item</b>	<b>Description of Change(s)</b>
N/A	N/A	Cover Letter	Changed the issuance dates of the permit and the permit revision number to T25
N/A	N/A	Permit Cover	Changed issuance dates of the permit and permit revision number to T25
3	3	Section 1 - Emission Source Table	Removed footnote **** for the 02Q .0501(c)(2) modification of boiler (ES5A) that requires the Permittee to file a Title V Air Quality Permit Application on or before 12 months after commencing operation, and notes that the permit shield does not apply
12	11	2.1 B.8	Removed requirement for the Permittee to file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of permit issuance for modification of this existing source (ES5A) pursuant to 02Q .0504(d).
12	12	2.1 B.8	Updated numbering from B.9 to B.8 with removal of B.8 above.
13	13	2.1 B.9	Updated numbering from B.10 to B.9 with removal of B.8 above.
22	22	2.2 A.1.e.	Updated State-only Toxics reporting to a Semiannual basis.

**ATTACHMENT 2 to cover letter of Permit No. 064919T25  
Craven County Wood Energy, L.P.**

**Insignificant Activities per 15A NCAC 02Q .0503(8)**

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
I1	One propane storage tank (18,000 gallon capacity)	N/A	N/A
I2	One sulfuric acid storage tank (4,100 gallon capacity)	N/A	N/A
I3	One water treatment chemical storage tank (550 gallon capacity)	N/A	N/A
I4	One water treatment chemical storage tank (550 gallon capacity)	N/A	N/A
I5	One water treatment chemical storage tank (1,625 gallon capacity)	N/A	N/A
I6	One water treatment chemical storage tank (550 gallon capacity)	N/A	N/A
I7	One sodium hypochlorite storage tank (550 gallon capacity)	N/A	N/A
I8a	One fuel oil storage tank (2,000 gallon capacity)	N/A	N/A
I8b	One fuel oil storage tank (2,000 gallon capacity)	N/A	N/A
I9	One gasoline storage tank (500 gallon capacity)	N/A	N/A
I10	One diesel-fired welding unit	N/A	N/A

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 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows:  
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
064919T25	06419T24	XX XX, 201X	August 31, 2022

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 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, 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:** **Craven County Wood Energy, L.P.**  
**Facility ID:** **2500158**

**Facility Site Location:** **NCSR 1225 at US Highway 70**  
**City, County, State, Zip:** **New Bern, Craven County, North Carolina 28562**

**Mailing Address:** **201 Executive Parkway**  
**City, State, Zip:** **New Bern, North Carolina 28562**

**Application Number:** **2500158.17A**  
**Complete Application Date:** **September 26, 2017**

**Primary SIC Code:** **4911**

**Division of Air Quality,**  
**Regional Office Address:** **Washington Regional Office**  
**North Carolina Division of Air Quality**  
**943 Washington Square Mall**  
**Washington, North Carolina 27889**

Permit issued this the XX<sup>th</sup> day of XX, 2018.

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William D. Willets, P.E., Chief, Permitting 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

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

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4, 5, 6	F6A-1 <b>PSD</b>	Bottom ash handling system	N/A	N/A
4, 5, 6	F6A-2 <b>PSD</b>	Fly ash handling system	N/A	N/A
4, 5, 6	FA <b>PSD</b>	Wood handling and storage operations	N/A	N/A
4, 7, 8, 9, 10, 11, 12, 13, 21, 24, 25, 26	ES5A <b>NSPS Db</b> <b>PSD</b> <b>GACT JJJJJ</b>	<p>One boiler (666 million Btu per hour maximum heat input rate) fired on:</p> <ul style="list-style-type: none"> <li>• Biomass fuel consisting of: <ul style="list-style-type: none"> <li>○ Clean cellulosic biomass***</li> <li>○ Creosote treated wood</li> <li>○ Plywood trimmings</li> <li>○ Particle board</li> <li>○ Weyerhaeuser sludge</li> <li>○ Brooder house poultry litter</li> </ul> </li> <li>• Natural gas (startup fuel only)</li> <li>• Propane (startup fuel only)</li> <li>• Used oil (onsite generation only)</li> </ul>	<p>CD5A-1</p> <p>CD5A-2</p>	<p>Multicyclone (56 twenty-four inch diameter tubes)</p> <p>Electrostatic precipitator (122,000 square feet of collection plate area)</p>
17	ES-11 <b>GACT ZZZZ</b>	One diesel-fired emergency fire pump (250 horsepower maximum rated power output)	N/A	N/A
17	ES-12 <b>GACT ZZZZ</b>	One diesel-fired emergency generator (175 kilowatt maximum rated power output)	N/A	N/A

\*\*\* *Clean cellulosic biomass* fuel must meet the definition as provided in 40 CFR 241.2, or it must be approved as a non-hazardous secondary material (NHSM) biomass fuel by EPA in accordance with 40 CFR 241.3 and 241.4.

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1 - Emission Source(s) and Control Device(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. Bottom ash handling system (ID No. F6A-1);  
Fly ash handling system (ID No. F6A-2); and  
Wood handling and storage operations (ID No. FA)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10P^{0.67}$ If $P \leq 30$ tons per hour; and $E = 55.0(P)^{0.11} - 40$ If $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter; and Visible emissions	Best Available Control Technology	15A NCAC 02D .0530
Odorous emissions	State Enforceable Only Refer to Section 2.2 A.2	15A NCAC 02D .1806

**1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from the bottom ash handling system (**ID No. F6A-1**), the fly ash handling system (**ID No. F6A-2**), and the wood handling and storage operations (**ID No. FA**) shall not exceed an allowable emission rate as calculated by the following equations:

$$E = 4.10P^{0.67} \quad \text{If } P \leq 30 \text{ tons per hour; and}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{If } P > 30 \text{ tons per hour}$$

Where: E = Allowable emission rate in pounds per hour  
P = Process weight in tons per hour

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

**Testing** [15A NCAC 02Q .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 02D .0515.

**Control Requirements** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, bottom ash and fly ash from the boiler (**ID No. ES5A**) shall be conveyed in the ash handling systems (**ID Nos. F6A-1 and F6A-2**) and the wood waste shall be conveyed from the hammer mill in the wood reclaim conveyor to storage areas via enclosed systems such that particulate matter emissions are minimized. In addition, the Permittee shall utilize the following dust suppression techniques to minimize particulate emissions:
- i. Water quenching of bottom ash after discharge from the grate of the boiler (**ID No. ES5A**);
  - ii. Enclosed dust collectors and water suppression system on the fly ash handling system (**ID No. F6A-2**), and
  - iii. Partial enclosed conveyors and transfer towers wherein all transfer points are closed, on the wood reclaim conveyor.



**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. To ensure compliance, the Permittee shall establish an inspection and maintenance schedule/checklist and perform such inspections and maintenance on the ash handling systems (**ID Nos. F6A-1 and F6A-2**), the hammer mill, and the wood reclaim conveyor 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:
  - i. A monthly external inspection of the enclosed work area around the hammer mill, enclosed conveyors, and transfer towers to ensure that covers are properly fitted;
  - ii. A monthly external inspection of the bottom ash handling system to ensure structural integrity; and
  - iii. A monthly external inspection of the water spray dust suppression system on the fly ash handling system.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ash handling systems, the hammer mill, and the wood reclaim conveyor are not inspected and maintained.
- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date and time of each recorded action;
  - ii. The results of each inspection;
  - iii. The results of any maintenance performed or corrective actions taken; and
  - iv. Any variance from the manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a report of maintenance performed on the ash handling systems (**ID Nos. F6A-1 and F6A-2**), the hammer mill, and/or the wood reclaim conveyor within 30 days of a written request by the DAQ.
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the wood handling and storage operations (**ID No. FA**), the bottom ash handling system (**ID No. F6A-1**), and the fly ash handling system (**ID No. F6A-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 the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .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.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once per week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from any of these sources are observed to be above normal, the Permittee shall either:
  - i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.
  - iii. For the bottom ash handling system (ID No. F6A-1) and the fly ash handling system (ID No. F6A-2), the Permittee shall perform the monitoring, recordkeeping, and reporting requirements found in Section 2.1 A.3.d, below.

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

**Recordkeeping** [15A NCAC 02Q .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 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 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

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

**3. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. The Permittee shall comply with the following "Best Available Control Technology" (BACT) requirements and emission limits, as applicable, for the wood handling and storage operations (**ID No. FA**), the bottom ash handling system (**ID No. F6A-1**), and the fly ash handling system (**ID No. F6A-2**):

Emission Source	Pollutant	Requirement/Emission Limit
Wood handling and storage operations ( <b>ID No. FA</b> )	PM	Work practices and equipment design
Bottom ash handling system ( <b>ID No. F6A-1</b> )	Opacity	0 percent
Fly ash handling system ( <b>ID No. F6A-2</b> )	Opacity	0 percent

**Control Requirements** [15A NCAC 02Q .0508(f)]

- b. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if emissions of particulate matter from the wood handling and storage operations are not controlled as follows:
  - i. Wood deliveries shall be made in a covered truck and discharged into one of two hydraulic dumpers equipped with sidewall curtains;
  - ii. The wood reclaim conveyor shall be covered and all transfer points shall be enclosed;
  - iii. Wood unloading onto storage pile shall utilize enclosed telescoping chutes kept as close to receiving pile as possible when dumping; and
  - iv. For traffic on wood storage pile and wind erosion from wood storage pile, the high moisture content of the stored wood and the coarse wood cover will be utilized to reduce fugitive emissions.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall perform the monitoring, recordkeeping, and reporting requirements for the wood handling and storage operations (**ID No. FA**) found in Section 2.1 A.1.d through f, above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring, recordkeeping, and reporting requirements are not performed.
- d. To ensure compliance, once per week the Permittee shall observe the emission points of the bottom ash handling system (**ID No. F6A-1**) and the fly ash handling system (**ID No. F6A-2**) for any visible emissions utilizing 40 CFR Part 60, Appendix A - Method 22. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If any visible emissions are observed from either of these sources, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0530.
- e. The results of the visible emissions monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date 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 02D .0530 if these records are not maintained.

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

**B. One multicyclone (56 twenty-four-inch diameter tubes; ID No. CD5A-1) and one electrostatic precipitator (122,000 square feet of collection plate area; ID No. CD5A-2) and one associated boiler (666 million Btu per hour maximum heat input rate; ID No. ES5A) fired on:**

- **Biomass fuel consisting of:**
  - Clean cellulosic biomass
  - Creosote treated wood
  - Plywood trimmings
  - Particle board
  - Weyerhaeuser sludge
  - Brooder house poultry litter
- **Natural gas (startup fuel only)**
- **Propane (startup fuel only)**
- **Used oil (onsite generation only)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter (PM)	<i>POS: (Primary Operating Scenario) - firing wood only or wood in combination with other fuels</i> 0.274 pounds of PM per million Btu heat input ( <i>wood only</i> )	15A NCAC 02D .0504
	<i>POS: (Primary Operating Scenario) - firing wood only or wood in combination with other fuels</i> $E_c = [(0.274)(Q_w) + (0.202)(Q_o)]/Q_t$ Where: E <sub>c</sub> = emission limit (lb PM/million Btu) Q <sub>w</sub> = actual wood heat input rate (million Btu per hour) Q <sub>o</sub> = actual other fuel heat input rate (million Btu per hour) Q <sub>t</sub> = actual total heat input (i.e. Q <sub>t</sub> = Q <sub>w</sub> + Q <sub>o</sub> )	15A NCAC 02D .0503
	<i>AOS: (Alternate Operating Scenario) - firing any combination of fuels that does not include wood</i> 0.202 pounds of PM per million Btu heat input	
Sulfur dioxide (SO <sub>2</sub> )	2.3 pounds of SO <sub>2</sub> per million Btu heat input	15A NCAC 02D .0516
Nitrogen oxides (NO <sub>x</sub> )	0.8 pounds per million Btu heat input	15A NCAC 02D .0519
NO <sub>x</sub> and SO <sub>2</sub>	Acid Rain program – Refer to Section 2.3	15A NCAC 02Q .0400
	Cross State Air Pollution Rules (CSAPR) Permit Requirements – Refer to Section 2.4	40 CFR Part 97, Subpart AAAAA, BBBB, and CCCCC
Particulate Matter (PM) Nitrogen oxides (NO <sub>x</sub> ) Visible emissions (VE)	PM: 0.10 pounds of PM per million Btu heat input NO <sub>x</sub> : The annual capacity factor for natural gas and propane, combined, shall not exceed 10 percent (0.10) VE: 20 percent opacity	15A NCAC 02D .0524 [40 CFR 60, Subpart Db]

PM; VOC, NO <sub>x</sub> and CO	Best Available Control Technology As defined in Section 2.1 B.7	15A NCAC 02D .0530
Particulate Matter (PM)	Compliance Assurance Monitoring	15A NCAC 02D .0614
Toxic Air Pollutants	State-Enforceable Only - Refer to Section 2.2 A.1	15A NCAC 02D .1100
Odorous Emissions	State Enforceable Only - Refer to Section 2.2 A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 02D .1111 [40 CFR 63, Subpart JJJJJ]
Hazardous Air Pollutants	Less than 10 tons per year of any HAP and less than 25 tons per year of a combination of HAPs See Section 2.2 A.3	15A NCAC 02Q .0317 Avoidance of 02D .1111 MACT Subpart DDDDDD

**1. ALTERNATE OPERATING SCENARIOS** [15A NCAC 02Q .0508(j)(1)]

The Permittee, contemporaneously with making a change from one operating scenario to another, shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(j)(1)]

**POS -firing wood fuel in combination with other fuels**

**AOS-firing any combination of fuels that does not include wood**

**2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of any combination of fuels that does not include biomass fuel (i.e. used oil, natural gas, and/or propane only) that are discharged from the boiler (**ID No. ES5A**) into the atmosphere shall not exceed 0.202 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of wood only or wood in combination with other fuels (i.e. biomass fuel alone or in combination with used oil, natural gas, and/or propane) that are discharged from the boiler (**ID No. ES5A**) into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0504]

$$E = \left[ \frac{(0.274 \times Q_w) + (0.202 \times Q_o)}{Q_w + Q_o} \right]$$

Where: Q<sub>w</sub> = actual wood heat input rate, in million Btu per hour; and

Q<sub>o</sub> = actual combined heat input rate of all fuels other than wood, in million Btu per hour

**Testing** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall perform the testing requirements for this source found in Section 2.1 B.6.c, below. If the results of that test are above the limit given in Section 2.1 B.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. No monitoring, recordkeeping, or reporting is required for particulate emissions from the combustion of used oil, natural gas, and/or propane in this source.
- e. Particulate matter emissions from this source shall be controlled by the multicyclone (**ID No. CD5A-1**) in series with the electrostatic precipitator (ESP) (**ID No. CD5A-2**). To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance as recommended by the manufacturers. In addition to the manufacturers' inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendation, as a minimum, the inspection and maintenance requirement shall include:
  - i. A monthly external visual inspection of the system duct work and the material collection units for leaks and of the critical components of the ESP such as rappers and the ash screw conveyor;
  - ii. A weekly check for any ESP equipment that does not generate an alarm in the turned-off state, to ensure it is switched on; and
  - iii. An annual (for each 12 month period from initial inspection) internal inspection of the multicyclone's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the multicyclone, ESP, and ductwork are not inspected and maintained.

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

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

**POS -firing wood fuel only**

**3. 15A NCAC 02D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of wood only or wood in combination with other fuels (i.e. biomass fuel alone or in combination with used oil, natural gas, and/or propane) that are discharged from the boiler (**ID No. ES5A**) into the atmosphere shall not exceed 0.274 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. The Permittee shall perform the testing requirements for this source found in Section 2.1 B.6.c, below. If the results of that test are above the limit given in Section 2.1 B.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall perform the monitoring, recordkeeping, and reporting requirements for the boiler (**ID No. ES5A**) found in Section 2.1 B. 2. e through h, above.

**4. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide (SO<sub>2</sub>) from the boiler (**ID No. ES5A**) 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 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition. If the results of this test are above the limit given in Section 2.1 B.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for SO<sub>2</sub> emissions from the combustion of biomass fuel, natural gas, and/or propane, in this source.
- d. The Permittee shall perform the monitoring, recordkeeping, and reporting requirements found in Section 2.2 A.1.c.iv and v, 2.2 A.1.d.i and iv, 2.2 A.1.e, and 2.2 A.1.f, below, for SO<sub>2</sub> emissions from the combustion of used oil in this boiler (**ID No. ES5A**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if these monitoring, recordkeeping, and reporting requirements are not performed.

**5. 15A NCAC 02D .0519: CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDE EMISSIONS**

- a. Emissions of nitrogen oxides from the boiler (**ID No. ES5A**) shall not exceed 0.8 pounds per million Btu heat input while burning natural gas, propane, and/or used oil.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition. If the results of this test are above the limit given in Section 2.1 B.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

**Monitoring/Record keeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for emissions of nitrogen oxides from the firing of natural gas, propane, and/or used oil in this source.

**6. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS**

**[40 CFR Part 60, Subpart Db]**

- a. 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 02D .0524 “New Source Performance Standards” (NSPS) as promulgated in 40 CFR Part 60, Subpart Db “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units” including Subpart A “General Provisions.”

**Emission Standards** [40 CFR §60.43b and §60.44b]

- b. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the Permittee does not restrict the operations of, and limit emissions from, the boiler (**ID No. ES5A**) as follows:
  - i. For particulate matter (PM) emissions from this source:
    - (A) The Permittee shall limit PM emissions to less than or equal to 0.1 pounds per million Btu heat input;
    - (B) The Permittee shall limit visible emissions such that they do not exceed 20 percent opacity (6-minute average), except that one 6-minute period with opacity not to exceed 27 percent is allowed per hour; and
    - (C) The Permittee shall operate this source such that the annual capacity factor for wood is no less than 30 percent (0.30).
  - ii. For emissions of nitrogen oxides (NO<sub>x</sub>) from this source: The Permittee shall operate this source such that the annual capacity factor for natural gas and/or propane is no greater than 10 percent (0.10).

**Testing** [15A NCAC 02Q .0508(f)]

- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits listed in Section 2.1 B.6.b.i(A), above, by testing the boiler once per permit term. The next test must be completed and the associated test report must be submitted to NC DAQ at least 9 calendar months prior to expiration of this permit unless an alternative date is approved by DAQ. The testing must be performed in accordance with a testing protocol approved by NC DAQ, General Condition JJ found in Section 3, and 15A NCAC 02D .2601. At least forty-five (45) days prior to performing this testing, the Permittee shall develop and submit a testing protocol to the Washington Regional Supervisor, Division of Air Quality for review and approval. If the results of this test are above the limits identified in Section 2.1 B.6.b.i(A), above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f) and 40 CFR §60.48b and §60.49b]

- d. The Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) on this source in accordance with the equipment manufacturer’s recommendations. The COMS output shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date and time of each recorded action;
  - ii. The results of each observation and/or test noting any emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions;
  - iii. The results of any maintenance performed or corrective actions taken; and
  - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- e. The Permittee shall monitor and maintain records of the quantities of each fuel (i.e. biomass fuel, natural gas, propane, and used oil) combusted in this source each day and these records shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- f. At the end of each calendar month, the Permittee shall calculate the annual capacity factor for each fuel (i.e. biomass fuel, natural gas, propane, and used oil) combusted in the boiler (on a 12-month rolling average basis). The Permittee

shall be deemed in noncompliance with 15A NCAC 02D .0524 if these annual capacity factors are not determined and recorded.

**Reporting** [15A NCAC 02Q .0508(f) and 40 CFR §60.49b]

- g. Within 30 days after conducting the testing required under Section 2.1 B.6.c, above, the Permittee shall submit a written report of the test results to the Washington Regional Office of NC DAQ.
- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June that includes:
  - i. Clear identification of all instances of deviations from the requirements of this permit; and either
  - ii. An excess emission report for any excess emissions that occurred during the reporting period, if applicable; or
  - iii. A statement indicating that no excess emissions occurred during the reporting period, if applicable.

**7. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. The Permittee shall comply with the following "Best Available Control Technology" (BACT) emission limits for the boiler (**ID No. ES5A**):

Emission Source	Pollutants	Emission Limits
Boiler ( <b>ID No. ES5A</b> )	Particulate matter (PM/PM <sub>10</sub> )	0.041 pounds per million Btu heat input
	Volatile Organic Compounds (VOC)	0.077 pounds per million Btu heat input
	Carbon Monoxide (CO)	0.66 pounds per million Btu heat input
	Nitrogen Oxides (NO <sub>x</sub> )	0.35 pounds per million Btu heat input

**Testing** [15A NCAC 02Q .0508(f)]

- b. The Permittee shall perform the testing requirements found in Section 2.1 B.6.c, above, for particulate matter emissions from this source. If the results of that test are above the associated limit given in Section 2.1 B.7.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Testing** [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required for VOC, CO, and/or NO<sub>x</sub> emissions from this source, that testing shall be performed in accordance with 15A NCAC 02D .2601, General Condition JJ found in Section 3, and a protocol approved by NC DAQ. If the results of this test are above the associated limit given in Section 2.1 B.7.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- d. The Permittee shall perform the monitoring, recordkeeping, and reporting requirements for this source (**ID No. ES5A**) found in Section 2.1 B.2.e through h, above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring, recordkeeping, and reporting requirements are not performed.

**8. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING**

- a. For the electrostatic precipitator (**ID No. CD5A-2**) associated with boiler (**ID No. ES5A**), the Permittee shall comply with 40 CFR part 64 pursuant to 15A NCAC 02D .0614 to ensure that the boiler complies with the emission limits of 15A NCAC 02D .0504, 02D .0503, 02D .0524 and 02D .0530.

**Background**

- b. **Emission Units:** Boiler (**ID No. ES5A**)
- c. **Applicable Regulation, Emission Limitation, and Monitoring Requirements**
  - i. Regulation: 15A NCAC 02D .0524, 02D .0530, 02D .0503 and 02D .0504: Particulates from Wood Burning Only or in combination with other fuels
  - ii. Emission Limits:
    - PM: 0.274 pounds of particulate matter per million Btu, Wood Only
    - PM:  $E_c = [(0.274)(Q_w) + (0.202)(Q_o)] / Q_T$
    - PM: 0.10 pounds of particulate matter per million Btu
    - PM: 0.041 pounds of particulate matter per million Btu, Wood Only
  - iii. Control Technology: Electrostatic precipitator (ESP) and multicyclone

**Monitoring Approach**

- d. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

<b>Measure</b>	<b>Indicator</b>
I. Indicator	Opacity of ESP exhaust
Measuring approach	Continuous opacity monitoring system (COMS) in ESP exhaust
II. Indicator Range	<p>The opacity indicator range for the ESP is a 1-hour average opacity of 20 percent.</p> <p>An excursion occurs when any 1-hour average opacity is greater than 20 percent. The excursion triggers corrective action and reporting requirement.</p> <p>The QIP (Quality Improvement Plan) threshold is when the total duration of opacity excursions is greater than 5 percent of the source operating time during any 6-month period. The QIP shall be prepared as required under 40 CFR 64.8.</p>
III. Performance Criteria	
Data Representativeness	The COMS is installed at a representative location in the boiler ESP exhaust stack per 40 CFR 60, Appendix B, Performance Specification (PS-1).
QA/QC Practices and Criteria	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and a quarterly filter audit is performed.
Monitoring Frequency	The opacity of the ESP exhaust is monitored continuously (every 10 seconds) using COMS
Data Collection Procedures	The data acquisition system shall retain all 6-minute opacity data.
Averaging Period	The 10-second opacity data are used to calculate the 6-minute averages according to PS-1.



**Reporting** [15A NCAC 02Q .0508(f) and 40 CFR 64.9(a)]

- e. 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 from the requirements of this permit must be clearly identified. In addition, the summary report shall contain the following information, as applicable:
  - i. Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - ii. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

**9. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**Applicability** [40 CFR 63.11193, 63.11194(a), (b), 63.11200]

- a. For this source (an existing boiler in the biomass subcategory, **ID No. ES5A**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."

**Definitions and Nomenclature**

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

**General Provisions** [40 CFR 63.11235]

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart JJJJJJ.

**Compliance Dates**

- d. The Permittee shall achieve compliance with the initial tune up requirement no later than March 21, 2014. [40 CFR 63.11196(a)(1), 63.11210(c)]
- e. The Permittee shall comply with the energy assessment requirement no later than March 21, 2014. [40 CFR 63.11196(a)(3)]  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements Section 2.1 B.9.d. and e. are not met.

**Notification of Compliance Status** [40 CFR 63.11225]

- f. The Permittee shall submit a Notification of Compliance Status no later than July 19, 2014.
  - i. The Notification of Compliance Status must be signed by a responsible official and include the following certifications of compliance:
    - (A) "This facility complies with the requirements in 40 CFR 63.11214 (i.e., condition h.) to conduct an initial tune-up of the boiler."
    - (B) "This facility has had an energy assessment performed according to Table 2 to this subpart (i.e., conditions i. and j.) and is an accurate depiction of the facility."
    - (C) "No secondary materials that are solid waste were combusted in any affected unit."
  - ii. The notification must be also submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 B.9.f. are not met.

**General Compliance Requirements** [15A NCAC 02Q .0508(b)]

- g. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 B.9.g. are not met.

**Performance Tune-up Requirements** [15A NCAC 02Q .0508(b)]

- h. The Permittee shall conduct an initial tune-up of the boiler and subsequent tune-ups biennially.
- i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up.
  - ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
  - iii. The tune-ups shall be conducted according to the following procedures:
    - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
    - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
    - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
    - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
    - (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
    - (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
- [40 CFR 63.11201(b), Table 2, 40 CFR 63.11223(a), (b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 B.9.h. are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(b)]

- i. The Permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following items, with the extent of the evaluation for items (i) to (iv) appropriate for the on-site technical hours listed in 40 CFR 63.11237:
- i. A visual inspection of the boiler system,
  - ii. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
  - iii. An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
  - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
  - v. A list of major energy conservation measures that are within the facility's control,
  - vi. A list of the energy savings potential of the energy conservation measures identified, and
  - vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 CFR 63.11201(b), Table 2]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 B.9. i. are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- j. The Permittee shall maintain the following records:
  - i. As required in 40 CFR 63.10(b)(2)(xiv), the Permittee shall keep a copy of each notification and report that was submitted to comply with this rule and all documentation supporting any Notification of Compliance Status that was submitted.
  - ii. The Permittee shall keep the following records to document conformance with the performance tune-ups:
    - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
    - (B) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
    - (C) A description of any corrective actions taken as a part of the tune-up of the boiler.
    - (D) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
  - iii. The Permittee shall keep a copy of each boiler energy assessment report.
  - iv. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
  - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 2.1 B.9.g., including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
  - vi. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, you must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).  
[40 CFR 63.11225(c), 63.11223(b)(6)]
- k. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years.  
[40 CFR 63.11225(d)]  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 B.9. j. and k. are not met.

**Reporting** [15A NCAC 02Q .0508(f)]

- l. The reporting requirements of 40 CFR 63.11225(b) shall be met by complying with General Condition P of Section 3 of this permit.

**C. One diesel-fired emergency fire pump (250 horsepower maximum rated power output; ID No. ES-11); and  
One diesel-fired emergency generator (175 kilowatt maximum rated power output; ID No. ES-12)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide (SO <sub>2</sub> )	2.3 pounds of SO <sub>2</sub> per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521

Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 02D .1111 [40 CFR 63, Subpart ZZZZ]
Odorous emissions	State Enforceable Only Refer to Section 2.2 A.2	15A NCAC 02D .1806

**1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from the emergency reciprocating internal combustion engines (i.e. RICE) (**ID Nos. ES-11 and ES-12**) 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 02D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the emergency RICE (**ID Nos. ES-11 and ES-12**).

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the emergency RICE (**ID Nos. ES-11 and ES-12**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the emergency RICE (**ID Nos. ES-11 and ES-12**).

**3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**Applicability** [40 CFR 63.6585, 63.6590(a)(1)(iii)]

- a. For these emission sources (existing stationary RICE located at an area source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111, as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

**Definitions and Nomenclature**

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

**Applicability Date** [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

**Notifications** [40 CFR 63.6645(a)(5)]

- d. The Permittee has no notification requirements.

**General Provisions** [40 CFR 63.6665]

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

**Operating and Maintenance Requirements** [15A NCAC 02Q .0508(b)]

- f. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d and 63.6625(h)]
- g. Except during periods of startup of the IC engine, the Permittee shall:
  - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
  - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary  
[40 CFR 63.6603(a), Table 2d]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in condition g. [40 CFR 63.6603(a), Table 2d ,63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in condition g., or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d]
- j. The Permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]
- m. In order for the engine to be considered an emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs i. through iii. below, is prohibited.
  - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
  - ii. The Permittee may emergency stationary RICE for any combination of the purposes specified in paragraph ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph iii. below counts as part of the 100 hours per calendar year allowed by this paragraph ii.
    - (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.  
The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph m. ii. above. Except as provided in paragraph iii. (A) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - (A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    - (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
    - (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    - (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    - (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
    - (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 63.6640(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 C.3. e. through m. are not met.

**Fuel Requirements** [15A NCAC 02Q .0508(f)]

- n. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in m. iii. (A) above, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[40 CFR 63.6604(b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 C.3. n. are not met.

**Monitoring** [15A NCAC 02Q .0508(f)]

- o. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)]

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- p. The Permittee shall keep the following:
  - i. 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 that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
  - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
  - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
  - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 C.3. k., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
  - v. Records of the maintenance conducted on the RICE pursuant to Section 2.1 C.3. l. [40 CFR 63.6655(d) and (e)]

- vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]
  - (A) If the engine is used for the purposes specified in m. iii. (A) above, the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
- q. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), (c)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 C.3. o. through q. are not met.

**Reporting** [15A NCAC 02Q .0508(f)]

- r. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b), (e) and 63.6650(f)]
  - i. The summary report shall also include any reporting required under Section 2.1 C.3. i., as necessary. [40 CFR 63.6603(a), Table 2d]
- s. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in m. iii. (A) above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]

The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if the requirements in Section 2.1 C.3. r. and s. are not met.

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

### A. Facility-wide affected emission sources

The following table provides a summary of limits and standards applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	<b>State-enforceable only</b> Permit limits shall not be exceeded.	15A NCAC 02D .1100
Odorous emissions	<b>State-enforceable only</b> Odorous emissions must be controlled.	15A NCAC 02D .1806
Hazardous Air Pollutants	<b>less than 10 tons per year of any HAP and less than 25 tons per year of a combination of HAPs</b>	15A NCAC 02Q .0317 Avoidance of 02D .1111

**State-Enforceable Only:**

**1. 15A NCAC 02D .1100: Control of Toxic Air Pollutants**

- a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following optimized permit limits (as established through approved modeling at 95% of each respective AAL) for emissions from the boiler (**ID No. ES5A**) shall not be exceeded:

Optimized		Optimized	
Toxic Pollutant	Allowable Limit	Toxic Pollutant	Allowable Limit
Acetaldehyde	1.10E+05 lb/hr	Aziridine	2.91E+03 lb/day
Acetic Acid	1.51E+04 lb/hr	Carbon disulfide	9.02E+04 lb/day
Acrolein	3.26E+02 lb/hr	Chlorobenzene	1.07E+06 lb/day
Ammonia	1.10E+04 lb/hr	Di(2-ethylhexyl)	
Aniline	4.08E+03 lb/hr	phthalate	1.46E+04 lb/day

Optimized		Optimized	
Toxic Pollutant	Allowable Limit	Toxic Pollutant	Allowable Limit
Benzyl chloride	2.04E+03 lb/hr	Dichlorodifluoro-	
Bromine	8.15E+02 lb/hr	methane	1.20E+08 lb/day
Chlorine	3.67E+03 lb/hr	Dichloroflouromethane	2.43E+05 lb/day
	1.82E+04 lb/day	Dimethyl sulfate	1.46E+03 lb/day
Chloroprene	1.43E+04 lb/hr	1,4 -dioxane	2.72E+05 lb/day
	2.13E+05 lb/day	Ethylenediamine	1.46E+05 lb/day
Cresol	8.97E+03 lb/hr	Hydrazine	2.91E+02 lb/day
Ethyl acetate	5.71E+05 lb/hr	Manganese & compounds	1.50E+04 lb/day
Ethyl mercaptan	4.08E+02 lb/hr	Manganese cyclopentadienyl	
Ethylene glycol mono-		tricarbonyl	2.91E+02 lb/day
ethyl ether	4.89E+02 lb/hr	Manganese tetroxide	3.01E+03 lb/day
Ethylenediamine	1.02E+04 lb/hr	Mercury	2.91E+02 lb/day
Flourides	1.02E+03 lb/hr	Mercury, alkyl	2.91E+02 lb/day
	7.76E+03 lb/day	Mercury, aryl	2.91E+02 lb/day
Formaldehyde	6.12E+02 lb/hr	n-Hexane	5.34E+05 lb/day
Hexachlorocyclo-		Nickel carbonyl	2.91E+02 lb/day
pentadiene	4.08E+01 lb/hr	Nickel metal	2.91E+03 lb/day
	2.91E+02 lb/day	Nickel, soluble	2.91E+02 lb/day
Hexane isomers	1.47E+06 lb/hr	Phosgene	1.21E+03 lb/day
Hydrogen chloride	2.85E+03 lb/hr	1,1,2,2-tetrachloro-1,2-	
Hydrogen cyanide	4.48E+03 lb/hr	difluoroethane	2.52E+07 lb/day
	6.79E+04 lb/day	1,1,2,2-tetrachloro-2,2-	
Hydrogen flouride	1.02E+03 lb/hr	difluoroethane	2.52E+07 lb/day
	1.46E+04 lb/day	Toluene-2,4-diisocyanate	9.70E+01 lb/day
Hydrogen sulfide	8.56E+03 lb/hr	Trichloroethylene	2.86E+04 lb/day
Maleic anydride	4.08E+02 lb/hr	Vinylidene chloride	5.82E+04 lb/day
	5.82E+03 lb/day	Acrylonitrile	6.91E+05 lb/year
Methyl chloroform	9.99E+05 lb/hr	Ammonium chromate	3.82E+02 lb/year
	5.82E+06 lb/day	Ammonium dichromate	3.82E+02 lb/year
Methylene chloride	6.93E+03 lb/hr	Arsenic	1.06E+03 lb/year
	1.10E+08 lb/year	Benzene	5.52E+05 lb/year
Methyl ethyl ketone	3.61E+05 lb/hr	Benzidine and salts	6.90E+01 lb/year
	1.79E+06 lb/day	Benzo(a)pyrene	1.52E+05 lb/year
Methyl isobutyl ketone	1.22E+05 lb/hr	Beryllium	1.89E+04 lb/year
	1.24E+06 lb/day	Beryllium chloride	1.89E+04 lb/year
Methyl mercaptan	2.04E+02 lb/hr	Beryllium flouride	1.89E+04 lb/year
Nitric acid	4.08E+03 lb/hr	Beryllium nitrate	1.89E+04 lb/year
Nitrobenzene	2.04E+03 lb/hr	Bis-chloromethyl ether	1.70E+03 lb/year
	2.91E+04 lb/day	1,3-butadiene	7.82E+05 lb/year
p-dichlorobenzene	2.69E+05 lb/hr	Cadmium	2.53E+04 lb/year
Pentachlorophenol	1.02E+02 lb/hr	Cadmium acetate	2.53E+04 lb/year
	1.46E+03 lb/day	Cadmium bromide	2.53E+04 lb/year
Phenol	3.87E+03 lb/hr	Calcium chromate	3.82E+02 lb/year
Phosphine	5.30E+02 lb/hr	Carbon tetrachloride	3.08E+07 lb/year
Styrene	4.32E+04 lb/hr	Chloroform	1.98E+07 lb/year
Sulfuric acid	4.08E+02 lb/hr	Chromic acid	3.82E+02 lb/year
	5.82E+03 lb/day	Chromium VI	3.82E+02 lb/year
Toluene	2.28E+05 lb/hr	Epichlorohydrin	3.82E+08 lb/year
	2.28E+06 lb/day	Ethylene dibromide	1.84E+06 lb/year
1,1,2-trichloro-1,2,2-		Ethylene dichloride	1.75E+07 lb/year
trifluoroethane	3.87E+06 lb/hr	Ethylene oxide	1.24E+05 lb/year
Xylene	2.65E+05 lb/hr	Hexachlorodibenzo-p-dioxin	3.49E+02 lb/year
	1.31E+06 lb/day	n-Nitrosodimethylamine	2.30E+05 lb/year
		Nickel subsulfide	9.66E+03 lb/year
		Perchloroethylene	8.74E+08 lb/year
		Polychlorinated biphenyls	3.82E+05 lb/year



<b>Toxic Pollutant</b>	<b>Optimized Allowable Limit</b>	<b>Toxic Pollutant</b>	<b>Optimized Allowable Limit</b>
		Potassium chromate	3.82E+02 lb/year
		Potassium dichromate	3.82E+02 lb/year
		Sodium chromate	3.82E+02 lb/year
		Sodium dichromate	3.82E+02 lb/year
		Strontium chromate	3.82E+02 lb/year
		1,1,1,2-tetrachloro-ethane	2.90E+07 lb/year
		Tetrachlorodibenzo-p-dioxin	1.38E+01 lb/year
		Vinyl chloride	1.75E+06 lb/year
		Zinc chromate	3.82E+02 lb/year

**Operational Restrictions**

- b. To ensure compliance, the Permittee shall comply with the following fuel restrictions for the boiler:
  - i. The total biomass fuel mixture to the boiler shall consist of:
    - (A) No more than 50 percent, by weight, creosote treated wood;
    - (B) No more than 121,615 tons per year, brooder house poultry litter, on a 12-month rolling average basis; and/or
    - (C) No more than 50 percent, by weight, clean cellulosic biomass other than listed below in (D).
    - (D) Clean wood, plywood trimmings, particleboard, and/or Weyerhaeuser sludge can be burned at any wood fuel mixture.
    - (E) The wood fuel mixture shall not include any pentachlorophenol treated railroad ties or utility poles.
  - ii. The Permittee may utilize a maximum of 3,000 gallons per year of used oil as a supplemental fuel in the boiler. The Permittee shall only utilize used oil that is generated at this facility and that meets the qualifications of equivalency with No. 4 fuel oil found in Section 2.2 A.1.c.v, below, as a supplemental fuel.

**Monitoring**

- c. To ensure compliance with the fuel restrictions, the Permittee shall conduct the following monitoring:
  - i. The Permittee shall monitor the treatment method (i.e. pentachlorophenol-treated or creosote-treated) of railroad ties and utility poles burned in the boiler each month;
  - ii. The Permittee shall monitor the weight percent of clean wood, creosote treated wood, plywood trimmings, particleboard, waste sludge, clean cellulosic biomass, and brooder house poultry litter burned in the boiler each month;
  - iii. The Permittee shall monitor the poultry litter burned in the boiler each month to ensure that only poultry litter from brooder houses is used as fuel;
  - iv. The Permittee shall monitor the amount of used oil burned in the boiler each month; and
  - v. The Permittee shall monitor the used oil burned in the boiler for equivalency with unadulterated No. 4 fuel oil by conducting a chemical analysis of the used oil in accordance with the North Carolina Division of Air Quality Toxics Protection Branch Recycled Oil Management Plan at least once per year. As outlined in the current version of that document, dated September 2006, DAQ considers used oils that meet the following restrictions to be equivalent to unadulterated No. 4 fuel oil:

<b>Constituent/Property</b>	<b>Allowable Level</b>
Arsenic	1.0 parts per million, maximum
Cadmium	2.0 parts per million, maximum
Chromium	5.0 parts per million, maximum
Lead	100 parts per million, maximum
Total Halogens	1000 parts per million, maximum
Flash Point	130 degrees Fahrenheit (°F), minimum
Sulfur	2.0% by weight, maximum
Ash	1.0% by weight, maximum

The DAQ reserves the right to require additional testing and/or monitoring of the used oil on an annual basis or without prior notice.

**Recordkeeping**

- d. The Permittee shall maintain the following records:
  - i. The Permittee shall maintain monthly records of the monitoring performed pursuant to Sections 2.2 A.1.c.i through v, above;
  - ii. The records of the treatment method of railroad ties and utility poles burned in the boiler required pursuant to Section 2.2 A.1.c.i, above, shall be in the form of a certification from the railroad tie supplier(s) that none of the railroad ties and utility poles supplied to this facility were treated with pentachlorophenol. In addition, these records shall include a certification by the Permittee that all railroad ties and utility poles burned in the boiler were obtained from the railroad tie and utility pole supplier(s) that provided the certifications referenced in the previous sentence;
  - iii. The records of the source of poultry litter burned in the boiler required pursuant to Section 2.2 A.1.c.iii, above, shall be in the form of a certification from the poultry litter supplier(s) that all of the poultry litter supplied to this facility was obtained from brooder houses, In addition, these records shall include a certification by the Permittee that all poultry litter burned in the boiler were obtained from the poultry litter supplier(s) that provided the certifications referenced in the previous sentence; and
  - iv. The Permittee shall maintain records of the results of testing performed pursuant to Section 2.2 A.1.c.v, above.

**Reporting**

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities to the Regional Supervisor of DAQ 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.
- f. Within 30 days after each calendar year the Permittee shall report the following to the Regional Supervisor, DAQ:
  - i. The results of the testing performed pursuant to Section 2.2 A.1.c.v, above, for the previous year; and
  - ii. The total gallons of used oil burned in the boiler during the previous year.

**State-Enforceable Only:**

**2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

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

**3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS  
LIMITATION TO AVOID BEING MAJOR FOR HAZARDOUS AIR POLLUTANTS**

- a. In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation, facility emissions shall be less than:
  - i. 10 tons per year of each individual hazardous air pollutant, and
  - ii. 25 tons per year of all hazardous air pollutants combined.

The Permittee shall be deemed in noncompliance with this condition and 15A NCAC 02D .1111 (MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY Subpart DDDDD) if the hazardous air pollutants (HAP) emissions exceed this limit.

- b. The Permittee shall use these example equations to calculate HAP emissions from boiler (ID No. ES5A) unless other HAP emission factors are approved by DAQ:

$$\text{HCl Emissions (ton/yr)} = [\text{TF (ton/yr)} \times \text{FHV (Btu/lb)} \times \text{2000 lb/ton}] \times [\text{uHCl}_{\text{ef}} (\text{lbHCl/MMBtu}) / 1.0 \text{ E6 Btu/MMBtu}]$$

$$\text{Styrene Emissions (ton/yr)} = [\text{TF (ton/yr)} \times \text{FHV (Btu/lb)} \times \text{2000 lb/ton}] \times [\text{uSTY}_{\text{ef}} (\text{lbSTY/MMBtu}) / 1.0 \text{ E6 Btu/MMBtu}]$$

$$\text{Other HAP Emissions (ton/yr)} = [\text{TF (ton/yr)} \times \text{FHV (Btu/lb)} \times \text{2000 lb/ton}] \times [\text{HAP}_{\text{ef}} (\text{lbHAP/MMBtu}) / 1.0 \text{ E6 Btu/MMBtu}]$$

Where

TF = Total Biomass Fuel Use (tons/yr) based on 80% woody biomass and  $\leq$  20% poultry litter mixture

FHV = Fuel Heating Value (Btu/lb) = 4,797 Btu/lb average based on the biomass fuel mixture above

uHCl<sub>ef</sub> = Uncontrolled HCl Emission Factor = 1.54 E-3 lb HCl/MMBtu fuel<sup>1</sup>

uSTY<sub>ef</sub> = Uncontrolled Styrene Emission Factor = 1.90 E-3 lb Styrene/MMBtu fuel<sup>2</sup>

HAP<sub>ef</sub> = HAP Emission Factor (lbHAP)/MMBtu fuel<sup>3</sup>

**Operational Restrictions**

- c. To ensure compliance, the Permittee shall comply with the following fuel restrictions for the boiler (ES5A):
  - i. The total biomass fuel mixture to the boiler shall consist of no more than 121,615 tons per year, brooder house poultry litter, on a 12-month rolling average basis.

**Testing Requirements** [15A NCAC 02Q .0508(f)]

- d. 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 2.2 A. 3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

**Monitoring/Recordkeeping Requirements** [15A NCAC 02Q .0508(f)]

- e. Maintain monthly usage records of the fuel fired containing hazardous air pollutants (HAP) as follows:
  - i. quantity of hazardous air pollutants in tons emitted on individual equipment (**ID No. ES5A**) and for the plant each month and for the 12-month period ending on that month,
  - ii. quantity of hazardous air pollutants in tons emitted by the plant each month and for the 12-month period ending on that month,
  - iii. quantity of all hazardous air pollutants in tons emitted by the plant each month and for the 12-month period ending on that month.
- f. Maintain a record of the amount of fuels fired such as woody biomass and brooder house poultry litter containing hazardous air pollutants on a monthly basis.  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these HAP emissions are not monitored or records are not maintained.
- g. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

- h. Submit to the Regional Supervisor, Division of Air Quality, semiannually, a report summarizing emissions of hazardous air pollutants containing the following:
  - i. total pounds of hazardous air pollutants emitted during the previous calendar year,
    - A. for each month during the semiannually period, and
    - B. for each 12-month period ending on each month during the semiannual period using a 12-month rolling average;
  - ii. greatest quantity in pounds of an individual hazardous air pollutant emitted:
    - A. for each month during the semiannually period, and
    - B. for each 12-month period ending on each month during the semiannual period using a 12-month rolling average.

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<sup>1</sup> The hydrogen chloride emission factor is based on the stack emissions test performed on the boiler (ID No. ES5A) on September 11, 2015 and approved July 7, 2016 by DAQ's Stationary Source Compliance Branch.

<sup>2</sup> The styrene emission factor is based on EPA's AP-42 Section 1.6 for wet wood.

<sup>3</sup> The other HAP emission factors are based on a combination of stack emissions tests and EPA's AP-42 Section 1.6.

## 2.3 - Phase II Acid Rain Permit Requirements

**ORIS code: 10525**

**Effective: TBD**

**Expires: January 31, 2021**

### A. Statement of Basis

Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Department of Environment and Natural Resources, Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q .0400 and 02Q .0500, and other applicable Laws.

### B. SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each affected unit

<b>ES5A (Acid Rain ID No. 4A)</b>	SO <sub>2</sub> allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	None
	NO <sub>x</sub> limit	See 40 CFR Parts 76.5, 76.6, and 76.7.

### C. Comments, Notes and Justifications

None.

### D. Phase II Permit Application (attached)

The Phase II Permit Application submitted for this facility, as approved by the Department of Environment and Natural Resources, Division of Air Quality, are part of this permit. The owners and operators of these Phase II acid rain sources must comply with the standard requirements and special provisions set forth in the following attached application.

Acid Rain Permit Application dated January 6, 2006.

#### Federal-Enforceable Only

## 2.4 - Cross State Air Pollution Rules (CSAPR) Permit Requirements

For the boiler (ID No. ES5A), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NO<sub>x</sub> Annual Trading Program", Subpart BBBBB "TR NO<sub>x</sub> Ozone Season Trading Program", and Subpart CCCCC "TR SO<sub>2</sub> Group 1 Trading Program".

## 2.5 - Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following non-applicable requirements:

1. The EPA's Clean Air Interstate Rules (CAIR) are not applicable to the boiler (ID No. ES5A), pursuant to 40 CFR 52.35(f) and 52.36(e). CAIR has been replaced by the Cross State Air Pollution Rule (CSAPR).
2. The requirements of 15A NCAC 02D .2400 "Clean Air Interstate Rules" no longer apply to the boiler (ID No. ES5A). According to 15A NCAC 02D .2401(a), the purpose of the 02D .2400 rules is to implement CAIR. Because CAIR no longer applies, the 02D .2400 rules also no longer apply.

[15A NCAC 02Q .0512(a)(1)(B)]

a. CAIR requirements

According to 40 CFR 52.35(f) and 52.36(e), CAIR no longer applies as of January 1, 2015. CAIR has been moved to Section 2.5 in the permit, which is for non-applicable regulations.

According to 15A NCAC 02D .2401(a), the purpose of the 02D .2400 rules was to implement CAIR. Given that CAIR no longer applies, the NC rules that implement CAIR also do not apply. Therefore, references to 02D .2400 rules have been moved to Section 2.5 in the permit.

b. CSAPR requirements

CSAPR (specifically, 40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC) was originally scheduled to take effect on January 1, 2012. This rule was planned as a replacement for CAIR. However, CSAPR was challenged in court and initially vacated by the DC Circuit Court. Legal issues were finally resolved in April 2014, when the US Supreme Court reversed that decision. Because the regulation was delayed by court proceedings, the effective date of the rule was moved to January 1, 2015.

Under this rule, the boiler at the facility is considered a "large electric generating unit", per 40 CFR 52.34. This rule and all requirements thereof are considered Federal-enforceable only. Compliance will be determined by the US EPA, not NC DAQ. A reference to this rule has been added to the permit.

## SECTION 3 - GENERAL CONDITIONS (version 5.1, 08/03/2017)

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
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 02Q .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 Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .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 02Q .0507(e) and 02Q .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 NO<sub>x</sub> 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 02Q .0508(i)(3)]

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 02Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .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 02Q .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 02Q .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 02Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .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 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .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 02D .0524), NESHAPS (15A NCAC 02D .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 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .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 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .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 02D .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 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .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 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .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 02Q .0508(e) and 02Q .0513(b)]**

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

**L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .0508(f) and 02Q .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 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, 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 02Q .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 02Q .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 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .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 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. 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 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .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 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .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 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .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 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .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 02D .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 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

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 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .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 02D .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 02Q .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 02D. 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 02D .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:
    - i. 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.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. 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 02D .2600 has precedence over all other tests.

**KK. Reopening for Cause** [15A NCAC 02Q .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 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .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 02Q .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 02Q .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. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

**MM. Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .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 02D .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 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .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 02Q .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 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

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

**OO. Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

## **ATTACHMENT 1 to Permit No. 06419T25**

### **List of Acronyms**

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

**ATTACHMENT 2 to Permit No. 06419T25**

**Craven County Wood Energy, L.P.**

**Acid Rain program permit application (4 page application)**