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MICHAEL A. ABRACZINSKAS

TBD

Mr. Thomas J. McKittrick Managing Member Duplin Bioenergy, LLC 5320 Old Pineville Road Charlotte, NC 28217

SUBJECT: Air Quality Permit No. 05492T25

Facility ID: 3100116 Duplin Bioenergy, LLC

Kenansville, Duplin County, North Carolina

Fee Class: Title V PSD Class: Major

Dear Mr. McKittrick:

In accordance with your completed Air Quality Permit Application for renewal of a Title V Permit (received March 3, 2017), we are forwarding herewith Air Quality Permit No. 05492T25 to Duplin Bioenergy, LLC, 1838 NC Highway 11 North, Kenansville, 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

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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.

Duplin County has triggered PSD Increment Tracking for the following pollutants: PM10, SO2, and NOx. This permit renewal application is not expected to consume or expand any increments for any tracked pollutants.

This Air Quality Permit shall be effective from TBD until TBD, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

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

Enclosure

c: Heather Ceron, US EPA, Region 4 (with review)
 Connie Horne (cover letter only)
 Wilmington Regional Office
 Central Files

Attachment to Air Quality Permit 05492T25

Insignificant Activities Pursuant to 15A NCAC 02Q .0503(8)

Emission Source ID	Emission Source Description
IES-1 (GACT, ZZZZ)	one diesel-fired emergency fire pump (340 horsepower maximum output)
IES-2	one diesel fuel oil storage tank
IES-3	one fire pump fuel oil storage tank
IES-4	one solvent parts cleaner
IES-5	one cooling tower
IES-6	tire shredders
IES-7	one turbine lube oil tank vent
IES-8	mechanical wood unloading, transfer, sizing, and storage operations

- 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

Summary of Changes to Permit

The following changes were made to the Duplin Bioenergy, LLC, Air Quality Permit No. 05492T24:

Page*	Section*	Description of Change(s)		
Throughout	Throughout	 Updated dates/permit numbers. Removed references to former minor modifications. Removed references to CAIR. Removed process rates from section headers. This information is recorded in the Emission Source List. Corrected/updated formatting. 		
n/a	Insignificant Activities List	 Indicated IES-1 is subject to GACT Subpart ZZZZ. Clarified description of IES-8. Removed IES-9. 		
3	Permitted Emission Source List	 Corrected NSPS and GACT callouts. Corrected control device descriptions for cyclones. 		
	2.1 A.	 Corrected condition numbering. Added condition number to the condition for 02Q .0508(j) [formerly .0508(p)] 		
	2.1 A.6.	Noted that "capacity factor" is based on a calendar year, per NSPS Db.		
	2.1 A.7. and 8.	Reformatted emission limits to make them easier to read.		
	2.1 A.9.	Reformatted CAM plan to match DAQ format and be overall clearer.		
	2.1 A.10 (former)	• Removed condition for 02D .0530(u) because the reporting requirement has been completed.		
	2.1 A.10	Rewrote permit condition for MACT Subpart JJJJJJ to reflect regulatory updates.		
	2.1 A.11.	Reformatted equation and emission factors to make them easier to read and update in the future.		
	2.1 A.12	Added permit condition for avoidance of MACT Subpart UUUUU		
	2.1 A.13.	Added permit condition for CSAPR.		
	2.1 C.2.	 Removed repetitive paragraphs. Shifted paragraphs to be under the proper "monitoring" or "recordkeeping" heading. 		
	2.2 A.1.	 Removed references to submitting new permit modification applications. Updated Cl and HCl formulas to be easier to read and update in the future. 		
	2.3 (former)	Removed this section because CAIR has expired.		

Page*	Section*	Description of Change(s)
	3.	Updated general conditions to v5.0

^{*} This refers to the current permit unless otherwise specified.





State of North Carolina Department of Environmental Quality Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
05492T25	05492T24	TBD	TBD

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: Duplin Bioenergy, LLC

Facility ID: 3100116

Facility Site Location: 1838 NC Highway 11 North & Hwy 903

City, County, State, Zip: Kenansville, Duplin County, North Carolina 28349

Mailing Address: 5320 Old Pineville Road

City, State, Zip: Charlotte, North Carolina 28217

Application Number: 3100116.17A Complete Application Date: March 3, 2017

Primary SIC Code: 4911

Division of Air Quality,
Regional Office Address:
Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, North Carolina 28405

Permit issued this the TBD day of TBD.

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 No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
00-000,	ES-1A (PSD; NSPS, Db; CAM; GACT, JJJJJJ)	one coal/ natural gas/ No. 2 and No. 4 fuel oil/ tire-derived fuel/ pelletized paper fuel/ flyash briquette/ unadulterated wood/ adulterated wood¹/ creosote-treated wood²/ engineered wood-fired electric	CD-1A2	one multicyclone (132 tubes, nine inches diameter, each)
	GAC1, 33333)	generating boiler (215 million Btu per hour maximum heat input rate)	CD-1A	one bagfilter (3.26:1 air-to-cloth ratio)
	ES-1B (PSD; NSPS, Db; CAM;	one coal/ natural gas/ No. 2 and No. 4 fuel oil/ tire-derived fuel/ pelletized paper fuel/ flyash briquette/ unadulterated wood/ adulterated wood ¹ / creosote-treated wood ² /	CD-1B2	one multicyclone (132 tubes, nine inches diameter, each)
	GACT, JJJJJJ)	engineered wood-fired electric generating boiler (215 million Btu per hour maximum heat input rate)	CD-1B	one bagfilter (3.26:1 air-to-cloth ratio)
	ES-3 (PSD)	one fly ash silo with wet slurry pugmill for unloading	CD-3	one silo binvent (100 square feet of filter area)
	ES-6 (PSD)	coal unloading/storage and transfer	Wetsup	wet suppression/chemical binder

^{1 &}quot;adulterated wood" includes wood waste.

^{2 &}quot;Creosote-treated wood" includes creosote-treated railroad ties, creosote-treated utility poles, and other similar fuels.

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Two boilers (ID Nos. ES-1A and ES-1B) and associated multicyclones (ID Nos. CD-1A2 and 1B2) and bagfilters (ID Nos. CD-1A and 1B)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation	
particulate matter	Primary Operating Scenario (POS) - firing wood in combination with coal and TDF See Section 2.1 A.2.	15A NCAC 02D .0504	
	Alternate Operating Scenario (AOS) - firing non-wood fuel only 0.23 pounds per million Btu heat input	15A NCAC 02D .0503	
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516	
visible emissions	20 percent opacity	15A NCAC 02D .0521	
PM10	6.02 pounds per hour per boiler	15A NCAC 02D .0501(e)	
sulfur dioxide	322.5 pounds per hour per boiler		
nitrogen oxides	141.9 pounds per hour per boiler		
carbon monoxide	120.4 pounds per hour per boiler		
nitrogen oxides	See Section 2.1 A.6.	15A NCAC 02D .0524 [NSPS Subpart Db]	
particulate matter	0.028 pounds per million Btu heat input		
sulfur dioxide	1.50 pounds per million Btu heat input	15A NCAC 02D .0530 [PSD]	
nitrogen oxides	0.66 pounds per million Btu heat input		
carbon monoxide	0.56 pounds per million Btu heat input		

Regulated Pollutant	Limits/Standards	Applicable Regulation	
nitrogen oxide	Less than 788 tons per consecutive 12 months	15A NCAC 02Q .0317	
carbon monoxide	Less than 204 tons per consecutive 12 months	[PSD Avoidance]	
PM10	See Section 2.1 A.9.	15A NCAC 02D .0614	
hazardous air pollutants	See Section 2.1 A.10	15A NCAC 02D .1111 [GACT Subpart JJJJJJ]	
hazardous air pollutants	See Section 2.1 A.12	15A NCAC 02Q .0317 [MACT Avoidance]	
nitrogen oxides and sulfur dioxide	Cross State Air Pollution Rule requirements. See Section 2.1 A.13.	40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC	
hazardous air pollutants	See Section 2.2 A.1.	15A NCAC 02Q .0317 [MACT Avoidance]	

1. 15A NCAC 02Q .0508(j): PERMIT CONTENT (Alternate Operating Scenarios)

a. The Permittee, contemporaneously with making a change from the Primary Operating Scenario (POS) in Section 2.1 A.2. to the Alternative Operating Scenario (AOS) in Section 2.1 A.3., shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(j)]

POS- firing wood fuel in combination with coal and TDF

2. 15A NCAC 02D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation in 15A NCAC 02D .0503(f):

$$E_{C} = \frac{[(E_{W})(Q_{W}) + (E_{O})(Q_{O})]}{Q_{W} + Q_{O}}$$

Where:

Ec = The particulate emission limit, in pounds per million Btu (lb/MMBtu);

Ew = 0.30 lb/MMBtu;

Qw = Boiler heat input from wood burning, in pounds per Btu (lb/Btu);

Eo = 0.23 lb/MMBtu;

Qo = Boiler heat input from fuels not included in Qw, in lb/Btu;

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 .0504.

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

- c. Particulate matter emissions from the boilers shall be controlled by the multicyclones. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance requirement must include the following:
 - i. a monthly external visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12-month period from initial inspection) internal inspection of the multicyclone's structural integrity.
- d. Particulate matter emissions from each boiler shall be controlled by a dedicated bagfilter. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include an annual internal inspection of the bagfilters for structural and fabric filter integrity.
- e. The Permittee shall install, operate, and maintain a pressure drop indicator on each bagfilter. The pressure drop across each bagfilter shall not exceed 10 inches of water.
- f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the control devices are not inspected and maintained, and/or if the pressure monitors are not installed, operated, and maintained and/or if the pressure drop is not maintained within the appropriate limit.

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

- g. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii the pressure drop for each bagfilter once weekly at a minimum when the boiler is operating;
 - iii. weekly periods of boiler downtime shall be noted in the logbook;
 - iv. the results of each inspection;
 - v. the results of any maintenance performed on the bagfilters and multicyclones; and
 - vi. any variance from manufacturer's recommendations, if any, and corrections made.
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not maintained.

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

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

AOS -firing non-wood fuel only

3. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of non-wood fuel that are discharged from these sources into the atmosphere shall not exceed 0.23 pounds per million Btu heat input.

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.3.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

- c. Particulate matter emissions from the boilers shall be controlled by the multicyclones. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
 - i. a monthly external visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12-month period from initial inspection) internal inspection of the multicyclone's structural integrity.
- d. Particulate matter emissions from each boiler shall be controlled by a dedicated bagfilter. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include an annual internal inspection of the bagfilters for structural and fabric filter integrity.
- e. The Permittee shall install, operate, and maintain a pressure drop indicator on each bagfilter. The pressure drop across each bagfilter shall not exceed 10 inches of water.
- f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the control devices are not inspected and maintained, and/or if the pressure monitors are not installed, operated, and maintained and/or if the pressure drop is not maintained within the appropriate limit.

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

- g. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii the pressure drop for each bagfilter once weekly at a minimum when the boiler is operating;
 - iii. weekly periods of boiler downtime shall be noted in the logbook;
 - iv. the results of each inspection;
 - v. the results of any maintenance performed on the bagfilters and multicyclones; and
 - vi. any variance from manufacturer's recommendations, if any, and corrections made.
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if these records are not maintained.

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

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

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

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

Testing [15A NCAC 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.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. To ensure compliance, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
 - i. the name of the coal supplier;
 - ii. the maximum sulfur content of the coal received per total shipment;
 - iii. a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following (A) through (E):
 - (A) sampling -- ASTM Method D 2234;
 - (B) preparation -- ASTM Method D 2013;
 - (C) gross calorific value (Btu) -- ASTM Method D-2015, D-3286 or D-1989;
 - (D) moisture content -- ASTM Method D 3173;
 - (E) sulfur content -- ASTM Method D 3177 or ASTM Method D 4239; and
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the coal is not monitored and recorded and/or if the sulfur content exceed any of the limits in Section 2.1 A.4.a.

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

e. The Permittee shall submit a summary report of the coal supplier certifications 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. This summary report shall include a certified statement signed by the responsible official that the records of coal supplier certification submitted represent all of the coal fired during the reporting period. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these boilers (**ID Nos. ES-1A and 1B**) 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.5.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, once a day the Permittee shall observe the emission points of these sources (ID Nos. ES-1A and 1B) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed

three (3) days of absent observations per semi-annual period. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.5.a., above.
- d. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

- e. The results of the observations shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action; and
 - 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.
- f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

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

6. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart Db)

a. For boilers (**ID Nos. ES-1A and ES-1B**), the Permittee shall comply with all applicable provisions for NOx emissions including the requirements for emission standards, compliance and performance testing, emission monitoring, and reporting and recordkeeping, in accordance with 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60, Subpart Db, including Subpart A "General Provisions".

Annual Capacity Factor [40 CFR 60.41b and 60.44b(c)]

- b. i. The annual capacity factor shall be calculated on a calendar year basis as described in §60.41b "Definitions".
 - ii. The Permittee shall limit the operation of the affected facility (**ID Nos. ES-1A and ES-1B**) such that the annual capacity factor for coal, No. 2 fuel oil, No. 4 fuel oil, and natural gas shall each be less than 10 percent (0.10) or less.
 - iii. The Permittee shall limit the operation of the affected facility (**ID Nos. ES-1A and ES-1B**) such that the annual capacity factor for any mixture of coal, No. 2 fuel oil, and No. 4 fuel oil with natural gas shall be less than 10 percent (0.10) or less.

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

c. For affected facilities (**ID Nos. ES-1A and ES-1B**), the Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor per Section 2.1 A.6.b for the reporting period.

- d. All records required by Section 2.1 A.6.c shall be maintained by the Permittee for a period of 2 years following the date of such record.
- e. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the records are not created and appropriately maintained and/or if the records indicate an exceedance of the annual capacity factor limits in Section 2.1 A.6.b.

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

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.

7. 15A NCAC 02D .0501(e): COMPLIANCE WITH NATIONAL AMBIENT AIR QUALITY STANDARDS

- a. Emissions from these boilers (ID Nos. ES-1A and 1B) shall not exceed the following limits (on a perboiler basis):
 - i. particulate matter: 6.02 pounds per hour (lb/hr);

ii. sulfur dioxide: 322.5 lb/hr; iii. nitrogen oxides: 141.9 lb/hr; and iv. carbon monoxide: 120.4 lb/hr.

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 any limit given in Section 2.1 A.7.a.i through iv, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

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

c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Sections 2.1 A.2.c through g and 2.1 A.3.c through g. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e) if the emissions exceed any of the limits in Section 2.1 A.7.a through d, above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e) if the control devices are not inspected and maintained.

8. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Emissions from these boilers (**ID Nos. ES-1A and 1B**) shall not exceed the following limits (on a heat input per-boiler basis):
 - i. particulate matter: 0.028 pounds per million Btu (lb/MMBtu);

ii. sulfur dioxide: 1.50 lb/MMBtu;iii. nitrogen oxides: 0.66 lb/MMBtu; andiv. carbon monoxide: 0.56 lb/MMBtu.

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 any limit given in Section 2.1 A.8.a.i through iv, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Sections 2.1 A.2.c through g and 2.1 A.3.c through g. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the emissions exceed any of the limits in Sections 2.1 A.8.a through d, above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the bagfilters are not inspected and maintained.

9. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. In order to assure compliance with the particulate matter (PM) emission limit in Sections 2.1 A.2, A.3, and A.7. (15A NCAC 02D .0504, .0503, and .0501(e), respectively), the Permittee shall control PM emissions from the two boilers (ID No. ES-1A and 1B) with multicyclones (ID Nos. CD-1A2 and 1B2) and bagfilters (ID Nos. CD-1A and 1B).

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

b. The Permittee shall comply with the monitoring approach as included in the following table:

Indicator [40 CFR 64.6(c)(1)(i)]	Opacity
Measurement Approach [§64.6(c)(1)(ii)]	Opacity is measured by observing the emission points. Results will be kept in a logbook (written or electronic format).
Indicator Range [§64.6(c)(2)]	An excursion is defined as any visible opacity emissions above 10 percent.
QA/QC Practices and Criteria [§64.3(b)(3)]	If more than six excursions in any 6-month period occur, the Permittee must perform inspection and maintenance on the fabric filter in accordance with Sections 2.1 A.2.c and d.
Monitoring Frequency [§64.3(b)(4)]	Daily.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if the required monitoring and/or recordkeeping is not completed.

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

- c. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include:
 - i. Information required by Sections 2.1 A.2.h and 2.1 A.3.h;
 - ii. As applicable, the information required by 40 CFR 70.6(a)(3)(iii);
 - iii. Summary information on the number, duration, and cause (or if the cause is unknown, a statement to that effect) of excursions or exceedances, as applicable, and the corrective actions taken; and
 - iv. All instances of deviations from the requirements of this permit must be clearly identified.

10. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 60, Subpart JJJJJJ)

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

a. For these boilers (**ID Nos. ES-1A and** 1B, existing boilers which burn more than 15 percent biomass on an annual heat input basis), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission

Standard 15A NCAC 2D .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 2D .1111 if the requirements in Paragraphs 2.1 A.10.d. and e. are not met.

Notification of Compliance Status [40 CFR 63.11225, 63.11214(c))]

f. The Permittee submitted the initial notification of compliance status on June 25, 2014.

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)]

If the Permittee does not comply with the general compliance requirements in Section 2.1 A.10.g., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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 every 2 years.
 - 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)]

If the Permittee does not comply with the tune-up requirements in Section 2.1 A.10.h., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

i. The Permittee completed the required energy assessment in April 2014. [40 CFR 63.11201(b), Table 2]

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 maintain on-site and submit, if requested by the Administrator, a report containing the following information:
 - A. 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.
 - B. A description of any corrective actions taken as a part of the tune-up of the boiler.
 - C. 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 the following records to document conformance with the applicable requirements:
 - 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 Permittee shall keep a copy of each boiler energy assessment report.
 - C. 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).
- D. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
- E. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Paragraph 2.1 A.10.g., including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- F. Records of the amounts of biomass fuels combusted as a percentage of all fuels combusted on a total annual heat input basis.

[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)]

If the Permittee does not keep the records required by Sections 2.1 A.10.j. and k., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

1. The reporting requirements of 40 CFR 63.11225(b) shall be met by complying with General Condition P.

11. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS For 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Facility-wide emissions shall not exceed the following limits.:
 - i. Nitrogen oxides (NOx): 788 tons per consecutive 12-month period; and
 - ii. Carbon monoxide (CO): 204 tons per consecutive 12-month period.
- b. i. The emission limits in Section 2.1 A.11.a apply at all times.
 - ii. The emission limits in Sections 2.1 A.7.a and 2.1 A.8.a apply at all times.

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

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Sections 2.1 A.11.a. and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- d. The use of fuel in both boilers shall be limited such that the facility wide NOx and CO emissions shall not exceed the limits given in Sections 2.1 A.11.a. and b. above for any consecutive 12-month period.
- e. The Permittee shall calculate the monthly emissions of CO from each boiler using the formula below:

$$E_{CO} = \sum (F_i \times EF_i)$$

Where:

 E_{CO} = Monthly emission rate of CO.

Fi = Monthly fuel use for fuel type i, in units matching EFi.

EFi = Approved emission factor of CO for fuel type *I*, see Table 1.

	Table 2.1 A.11-1: CO Emission Factors
Coal:	0.17 pounds per million Btu (lb/MMBtu);
Natural gas:	84 pounds per million standard cubic feet;
Oil:	5 pounds per thousand gallons;
TDF:	7.26 lb/MMBtu;
Wood:	0.0604 lb/MMBtu for ES-1A; and 0.153 lb/MMBtu for ES-1B

- f. The Permittee shall monitor NOx emissions from the boilers (**ID Nos. ES-1A and ES-1B**) using a continuous emissions monitoring system (CEMS) that meets the requirements of 40 CFR Part 75. Missing CEMS data shall be filled in accordance with 40 CFR Part 75.
- g. For each month, the Permittee shall record the following in a logbook (written or electronic format):
 - i. The calculation of CO emissions for that month;
 - ii. The total monthly CO emissions for that month;
 - iii. Data recorded by the NOx CEMS; and
 - iv. The total CO and NOx emissions for the 12-month period ending on that month.
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the CO calculations are not performed, if the required records are not kept, if the NOx CEMS is not installed and operated, and/or if the records indicate an exceedance of the limits in Section 2.1 A.11.a.

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

- i. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly NOx and CO emissions for the previous 17 months on a facility wide basis. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
 - ii. All instances of deviations from the requirements of this permit must be clearly identified.

12. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS For 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. In order to avoid applicability of 15A NCAC 02D .1111 and 40 CFR Part 63, Subpart UUUUU, the average annual heat input from coal and from oil for each boiler shall be limited to less than 10 percent over any three calendar-year period and to less than 15 percent over any one calendar-year period. [40 CFR 63.9983(c)]

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

b. The Permittee shall demonstrate compliance by following the monitoring/recordkeeping/reporting requirements of Section 2.1 A.6.

Federal-Enforceable Only

13. Cross State Air Pollution Rule

(40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC)

For the two boilers (**ID Nos. ES-1A and 1B**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "CSAPR NOx Annual Trading Program", Subpart BBBBB "CSAPR NOx Ozone Season Trading Program", and Subpart CCCCC "CSAPR SO₂ Group 1 Trading Program"



B. One fly ash silo (ID No. ES-3) with wet slurry pugmill for unloading and associated binvent (ID No. CD-3)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 B.1.	15A NCAC 02D .0515
Visible emissions	20 percent	15A NCAC 02D .0520
Particulate matter	Use approved control device.	15A NCAC 02D .0530

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source (**ID No. ES-3**) shall not exceed an allowable emission rate as calculated by the following equations:

For P < 30: $E = 4.10 \times P^{0.67}$ For $P \ge 30$: $E = 55 \times P^{0.11} - 40$

Where

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

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

Testing [15A NCAC 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 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from this emission source shall be controlled by one filter (ID No. CD-3). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturers. 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 an annual internal inspection of the filter for structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the control devices are not inspected and maintained.

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

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

e. 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. Upon a written request from the DAQ, the Permittee shall submit, within 30 days of such request, a report of any maintenance performed on a control device.
- g. The Permittee shall submit a summary report of the monitoring and recordkeeping by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Visible emissions from this source (**ID No. ES-3**) 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 B.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 a week the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - 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 B.2. a., above.
- d. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action; and
 - 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.
- f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

g. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the

preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. The Permittee shall operate and maintain the filter (ID No. CD-3) installed on the ash silo (ID No. ES-3).

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

b. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Section 2.1 B.1.c through f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the filter is not inspected and maintained.



C. Coal unloading/storage and transfer (ID No. ES-6)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	20 percent opacity	15A NCAC 02D .0521
particulate matter	Use wet suppression as specified in Section 2.1 C.2.	15A NCAC 02D .0530

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the coal unloading/storage and transfer (**ID No. ES-6**) 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 found. 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 .0521.

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

- c. To ensure compliance, once a week the Permittee shall observe these sources for any visible emissions above normal. 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 2.1 C.1.a.

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

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format), kept 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.

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

2. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall employ wet suppression on coal unloading, front end loader operations, coal storage pile load in/out, and wind erosion coal piles. Maintain partial enclosures on conveyors.

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

- b. i. To ensure compliance, the Permittee shall perform inspections and maintenance on the wet suppression system 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 must include a monthly external visual inspection of the system for integrity of piping and nozzles.
 - ii. The Permittee shall perform a monthly visual inspection along with maintenance as appropriate on the partially enclosed conveyors to ensure covers are structurally sound and in good repair.

If the required monitoring and maintenance activities are not performed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- c. A wet suppression log shall be maintained indicating areas and dates wet suppression was applied. The log shall be made available to a DAQ representative upon request.
- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action:
 - ii. the results of each action or inspection;
 - iii. a report of any maintenance performed on any wet suppression system and conveyor enclosure; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

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

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on a wet suppression system or conveyor enclosure.
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and 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.

2.2 - Other Applicable Requirements

A. Facility-wide

Regulated Pollutant	Limits/Standards	Applicable Regulation
hazardous air pollutants	less than 10 tons per year of any single HAP and less than 25 tons per year of any combination of HAP	15A NCAC 02Q .0317

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. In order to avoid applicability of 15A NCAC 02D .1111 and 40 CFR Part 63, Subpart DDDDD, the total hazardous air pollutant (HAP) emissions from the facility shall be less than 10 tons of any single HAP and 25 tons of combined HAP per consecutive 12-month period.

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

b. Under the provisions of NCGS 143-215.108, the Permittee shall develop emissions factors for hydrochloric acid (HCl) and chlorine (Cl) in pounds per million Btu by testing one of the boilers (**ID Nos. ES-1A and ES-1B**) No. 2 and No. 4 fuel oils and tire derived fuel, that will be combusted in either boiler. A testing protocol must be approved by the DAQ. A testing protocol must be approved by the DAQ. Emissions testing and reporting requirements can be found in General Condition JJ. Testing shall be completed and the results submitted within the later of 180 days after the effective date of this permit or 180 days after the Permittee commences the commercial use of that fuel, provided that in either case an alternate date may be approved by the DAQ. Testing shall be performed in such a way that allows developing individual emissions factors for use in Section 2.2 A.1.c, below. If this test is not performed and/or the emissions factors of HCl and chlorine for each fuel are not developed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

c. Calculations of emissions of HCl and chlorine shall be made at the end of each month and recorded monthly in a logbook, in accordance with the following formula.

$$E_{Cl \text{ or } HCl} = \sum (Q_i \times H_i \times EF_i)$$

Where:

 $E_{Cl} / E_{HCl} = Monthly emission rate of Cl or HCl$

Qi = Monthly fuel use for fuel type i in units appropriate for Hi.

Hi = Approved heat content for fuel type i, see Table 1.

EFi = Approved emission factor of Cl / HCl for fuel type I, see Table 2 (HCl) and Table 3 (Cl).

The approved heat contents and emission factors are listed below:

Table 2.2 A.1-1: Heat Content		
Unadulterated Wood	4,852 Btu per pound (Btu/lb);	
Engineered Wood	6,389 Btu/lb;	
Wood Waste	6,159 Btu/lb;	
Creosote-treated Wood	6,251 Btu/lb;	
Coal	13,320 Btu/lb;	
Tire Derived Fuel	13,650 Btu/lb;	

Table 2.2 A.1-1: Heat Content		
No. 2 Fuel Oil	140,000 Btu per gallon (Btu/gal); and	
No. 4 Fuel Oil	150,000 Btu/gal	

Table 2.2 A.1-2: HCl Emission Factors		
Unadulterated Wood	3.79 E-04 pounds per million Btu (lb/MMBtu);	
Engineered Wood	4.14 E-03 lb/MMBtu;	
Wood Waste	5.21 E-03 lb/MMBtu;	
Creosote-treated Wood	6.47 E-03 lb/MMBtu;	
Coal	7.50 E-02 lb/MMBtu;	
Tire Derived Fuel		
No. 2 Fuel Oil	To be determined by testing. See Section 2.2 A.1.b.	
No. 4 Fuel Oil		

Table 2.2 A.1-3: Cl Emission Factors		
Unadulterated Wood	7.09 E-04 lb/MMBtu;	
Engineered Wood	6.55 E-04 lb/MMBtu;	
Wood Waste	2.92 E-04 lb/MMBtu;	
Creosote-treated Wood	6.16 E-04 lb/MMBtu;	
Coal	4.00 E-02 lb/MMBtu;	
Tire Derived Fuel	6.00 E-02 lb/MMBtu;	
No. 2 Fuel Oil	1.30 E-02 lb/MMBtu;	
No. 4 Fuel Oil	1.30 E-02 lb/MMBtu;	

If the required records are not maintained in a logbook or the records indicate an exceedance of the limit in Section 2.2 A.1, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

- d. Prior to burning pelletized paper or flyash briquettes in boilers (**ID Nos. ES-1A and ES-1B**), the Permittee shall request a modification of the permit and provide to DAQ for its review and approval such data as may be necessary to calculate the emissions of HCl and chlorine. The Permittee shall not burn pelletized paper or flyash briquettes in boilers (**ID Nos. ES-1A and ES-1B**), until such data and calculation methodology are approved by DAQ.
- e. The Permittee shall keep a record of the MACT 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 shall 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 [15A NCAC 02Q .0508 (f)]

f. Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. The monthly HCl and chlorine emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months, and
- ii. All instances of deviations from the requirements of this permit must be clearly identified.





SECTION 3- GENERAL CONDITIONS (version 5.0, 06/08/2017)

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.
- 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 NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

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

E. **Duty to Comply** [15A NCAC 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.

- 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.
- 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.)

"<u>Deviations</u>" - 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:

- 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:

- 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. <u>Duty to Provide Information (submittal of information)</u> [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. <u>Compliance Certification</u> [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 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. <u>Termination, Modification, and Revocation of the Permit</u> [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. <u>Insignificant Activities</u> [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 02O .0508(i)(8)]

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

V. <u>Inspection and Entry</u> [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)]

- 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. <u>Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)</u> – 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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 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 to Air Quality Permit 05492T25

List of Acronyms

AOS Alternate Operating Scenario

BACT Best Available Control Technology

Btu British thermal unit CAA Clean Air Act

CSAPR Cross State Air Pollution Rule
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
DAO Division of Air Quality

DEQ Department of Environmental QualityEMC Environmental Management Commission

EPA Environmental Protection Agency

FR Federal Register

GACT Generally Available Control Technology

HAP Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NCAC North Carolina Administrative Code NCGS North Carolina General Statutes

NESHAP National Emission Standards for Hazardous Air Pollutants

NO_X Nitrogen Oxides

NSPS New Source Performance Standard OAH Office of Administrative Hearings

PM Particulate Matter

PM₁₀ Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

POS Primary Operating Scenario

PSD Prevention of Significant Deterioration
RACT Reasonably Available Control Technology

SIC Standard Industrial Classification
SIP State Implementation Plan

SO₂ Sulfur Dioxide

tpy Tons Per Year

VOC Volatile Organic Compound