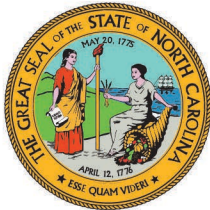


ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

MICHAEL ABRACZINSKAS
Director



NORTH CAROLINA
Environmental Quality

May 23, 2022

Carey Davis
Executive Vice President
North Carolina Renewable Power - Lumberton, LLC
2100 Southbridge Parkway, Suite 540
Birmingham, AL 35209

SUBJECT: Air Quality Permit No. 05543T29
Facility ID: 7800166
North Carolina Renewable Power - Lumberton, LLC
Lumberton, Robeson County, North Carolina
Fee Class: Title V
PSD Status: Major

Dear Mr. Davis:

In accordance with your completed Air Quality Permit Application for a Prevention of Significant Deterioration modification received October 29, 2017 and permit addendum received on June 23, 2021, we are forwarding herewith Air Quality Permit No. 05543T29 authorizing the construction and the operation, of the emission sources and associated air pollution control devices 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 identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. 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 file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

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



North Carolina Department of Environmental Quality | Division of Air Quality
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641
919.707.8400

Mr. Davis
May 23, 2022
Page 2

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.

Robeson County has triggered PSD Increment Tracking for PM_{2.5}, PM₁₀, NO_x, and SO₂. This modification will result in an increase in 11.4 pounds per hour of PM_{2.5}, 14.9 pounds per hour of PM₁₀, 57.1 pounds per hour of NO_x and 29.8 pounds per hour of SO₂.

This Air Quality Permit shall be effective from May 23, 2022 until August 31, 2022, 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 Betty Gatano, P.E., at 919-707-8736 or betty.gatano@ncdenr.gov.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Mark J. Cuilla".

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Michael Sparks, EPA Region 4 (permit and review)
Fayetteville Regional Office
Central Files
Connie Horne (cover letter only)

**NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT
DECISION**

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at <https://www.oah.nc.gov/hearings-division/filing/hearing-forms>. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at <https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case>. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process .

Summary of Changes to the Permit

The following changes were made to Air Permit No. 05543T28:

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
Cover and throughout	--	Cover and throughout	--	Updated all dates and permit revision numbers.
Table of Contents	--	Table of Contents	--	<ul style="list-style-type: none"> Removed Section 2.3. The Schedule of Compliance is met with the issuance of the permit containing BACT limits for firing poultry litter and non-CISWI subject wood in the boilers (ID Nos. ES-1A and ES-1B). Renumbered accordingly.
3	--	3	--	"List of Acronyms" has been moved to Page 3 of the permit.
3	1.0 – Equipment Table	4	1.0 – Equipment Table	<ul style="list-style-type: none"> Removed page numbers. Added reference to PSD for boilers (ID Nos. ES-1A and ES-1B) and belt dryers (ID Nos. ES-17, ES-18, and ES-19). Removed injection rate of 300 lbs/hr of aqueous ammonia injection rate for the SNCR (ID Nos. CD-1A3 and CD-1B3). The injection rate may vary based on the amount of ammonia in the poultry litter and too much ammonia inject could result in ammonia slip from the SNCR. Added footnote defining the term "non-CISWI subject wood." Removed footnote stating the dry sorbent injection systems (ID Nos. CD-1C4) may be operated intermittently. This system must be operated continually to ensure the BACT emission limit for SO₂ is maintained. Removed footnote stating these control devices (ID Nos. CD-1C and CD-1C4) are listed as a minor modification per 15A NCAC 02Q .0515.
4 – 5	2.1 A – Regulations Table	5 – 6	2.1 A – Regulations Table	<ul style="list-style-type: none"> Clarified reference to 15A NCAC 02D .0504 when firing poultry litter in the boilers (ID Nos. ES-1A and ES-1B). NCDAQ considers poultry litter as wood for the purposes of 15A NCAC 02D .0504 Added reference to BACT limits under 15A NCAC 02D .0530 for firing poultry litter and non-CISWI subject wood in the boilers (ID Nos. ES-1A and ES-1B). Clarified reference to SB3 BACT limits 0530 for lead and mercury when firing poultry litter and non-CISWI subject wood in the boilers (ID Nos. ES-1A and ES-1B). Removed reference to PSD avoidance under 15A NCAC 02Q .0317. Removed reference to Schedule of Compliance.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
5	2.1 A.1.a	6	2.1 A.1.a	Clarified applicability to 15A NCAC 02D .0504 when firing poultry litter in the boilers (ID Nos. ES-1A and ES-1B). NCDAQ considers poultry litter as wood for the purposes of 15A NCAC 02D .0504.
--	--	6	2.1 A.1.d	<ul style="list-style-type: none"> Added requirement to conduct testing to demonstrate compliance with 15A NCAC 02D .0504 after completion of the Boiler Maintenance Project. Renumbered the permit accordingly.
7	2.1 A.3.c	8	2.1 A.3.c	Updated requirement to conduct initial compliance testing to demonstrate compliance with 15A NCAC 02D .0524 after completion of the Boiler Maintenance Project.
7	2.1 A.3.n	8	2.1 A.3.n	Added requirement for quarterly calculations as required by DAQ policy memo dated October 27, 2020.
--	--	9	2.1 A.4.c	Added requirement to conduct compliance testing to demonstrate compliance with 15A NCAC 02D .0530 after completion of the Boiler Maintenance Project.
--	--	9	2.1 A.4.d	Added permit condition requiring Permittee to maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions, including during periods of startup, shutdown, and malfunction.
--	--	9 – 13	2.1 A.5	<ul style="list-style-type: none"> Added permit condition for 15A NCAC 02D .0530 when firing poultry litter and non-CISWI subject wood in boilers (ID Nos. ES-1A and ES-1B). Renumbered permit accordingly and updated all cross references.
8 – 9	2.1 A.5	13 – 14	2.1 A.6	<ul style="list-style-type: none"> Modified CAM condition to reference PM as well as PM10. Added underlying standards triggering CAM.
--	--	17	2.1 A.8.c	Added requirement to conduct compliance testing to demonstrate compliance with SB3 BACT emission limits after completion of the Boiler Maintenance Project.
--	--	17	2.1 A.8.d	Added permit condition requiring Permittee to maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions, including during periods of startup, shutdown, and malfunction.
12	2.1 A.7.c	17	2.1 A.8.e	<ul style="list-style-type: none"> Reformatted CEMS monitoring condition for clarity. Added a statement clarifying data availability for compliance averaging under SB3 BACT.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
--	--	18	2.1 A.8.i	Added requirement for quarterly calculations as required by DAQ policy memo dated October 27, 2020.
13	2.1 A.8	--	--	Removed requirements under NCGS 62-133.8 for firing poultry litter and non-CISWI subject wood in the boilers. The requirement for State BACT limits is no longer required with the incorporation of PSD BACT limits into the permit.
--	--	18	2.1 A.9	Added SB3 BACT requirements for lead and mercury when firing poultry litter and non-CISWI subject wood in the boilers.
14	2.1 C – Regulations Table	20	2.1 C – Regulations Table	<ul style="list-style-type: none"> Added reference to PSD BACT under 15A NCAC 02D .0530 for belt dryers (ID Nos. ES-17, ES-18, and ES-19). Added reference to 15A NCAC 02Q .0504 for belt dryer (ID No. ES-21). Added reference to 15A NCAC 02Q .0317 for MACT avoidance.
--	--	20	2.1 C.1	<ul style="list-style-type: none"> Added BACT (no controls) under 15A NCAC 02D .0530 for belt dryers (ID Nos. ES-17, ES-18, and ES-19). Renumbered permit accordingly.
14 -15	2.1 C.2	20 – 21	2.1 C.3	Updated condition for 15A NCAC 02Q .0504 with most current permitting language.
15	2.1 D Regulations Table	22	2.1 D Regulations Table	<ul style="list-style-type: none"> Corrected reference for requiring operation of the RTO at all times to specify 15A NCAC 02D .0611 rather than 15A NCAC 02Q .0317 for PSD avoidance. Corrected reference for 15A NCAC 02Q .0504. Removed reference to PSD avoidance under 15A NCAC 02Q .0317.
17	2.1 D.3.c	23 – 24	2.1 D.3.c	Updated condition for 15A NCAC 02Q .0521 with most current permitting language
18	2.1 D.4.i	24	2.1 D.4.i	<ul style="list-style-type: none"> Added requirement to record results of monthly VOC calculations. Added noncompliance statement.
18	2.1 D.5	25	2.1 D.5	Updated condition for 15A NCAC 02Q .0504 with most current permitting language.
--	--	26	2.1 F	Added permit condition for the poultry litter storage warehouse (ID No. IES-16) for BACT.
20	2.2 A Reference Table	27	2.2 A Reference Table	Removed reference to PSD avoidance under 15A NCAC 02Q .0317.
20	2.2 A.1.b.i	27	2.2 A.1.b.i	Updated requirement to conduct testing to establish emission factors for hydrogen chloride and chlorine.
20	2.2 A.1.b.ii	27	2.2 A.1.b.ii	Added statement allowing testing dates to be revised if approved by DAQ, in accordance with DAQ policy.
--	--	27	2.2 A.1.b.iii(A)	<ul style="list-style-type: none"> Added requirement stating that testing shall be conducted in accordance with 15A NCAC 02D .2600. Renumbered permit accordingly.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
21	2.2 A.1.b.iii(C)	27	2.2 A.1.b.iii(D)	Changed date test reports are due to DAQ to 30 days after sample collection, as required by 15A NCAC 02D .2600.
21	2.2 A.1.b.iii(D)	27	2.2 A.1.b.iii(E)	Updated requirement to establish a sorbent injection rate for the DSI (ID No. CD-1C4).
--	--	28	2.2 A.1.c	<ul style="list-style-type: none"> Added testing requirement for belt dryers (ID Nos. ES-17, ES-18, ES-19, and ES-21). Renumbered permit accordingly.
21	2.2 A.1.d	28	2.2 A.1.e	Removed language stating the dry sorbent injection system (ID No. CD-1C4) is only operated to ensure compliance with the HAP avoidance limits. This control device must be operated continuously to ensure compliance with the SO ₂ BACT emission limit.
--	--	29	2.2 A.h	<ul style="list-style-type: none"> Added requirement limiting operation of belt dryer (ID No. ES-21). Renumbered permit accordingly.
22	2.2 A.h	29	2.2 A.k	Updated equations for calculating emissions of hydrogen chloride and chloride to account for poultry cake.
23 – 24	2.2 A.2	--	--	<ul style="list-style-type: none"> Removed PSD avoidance condition. The modification to add poultry litter as fuel for the boilers was deemed a major modification under PSD. Renumbered permit accordingly.
--	--	32	2.2 B.1.c	<ul style="list-style-type: none"> Added requirement to demonstrate compliance with 15A NCAC 02D .1100 upon completion of the source tests on the belt dryers (ID Nos. ES-17, ES-18, ES-19, and ES-21). Renumbered permit accordingly.
27	2.3	--	--	<ul style="list-style-type: none"> Removed Schedule of Compliance for compliance with SOC 2017-001. The SOC 2017-001 will expire upon issuance of the PSD permit to the Permittee and the date the PSD permit becomes final and enforceable after all periods to appeal the issuance of the permit have expired and after all penalties accrued under SOC 2017-001 have been paid in full. Renumbered permit accordingly.
--	Attachment	34	Section 3	Moved “List of Insignificant Activities” to Section 3 in accordance with the updated formatting for TV permits.
29 – 38	Section 3	35 – 43	Section 4	Updated General Permit Conditions with most current version (version 6.0, 01/07/2022).



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
05543T29	05543T28	May 23, 2022	August 31, 2022

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than February 28, 2022.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: North Carolina Renewable Power –Lumberton, LLC
Facility ID: 7800166
Primary SIC Code: 4911
NAICS: 221112

Facility Site Location: 1866 Hestertown Road
City, County, State, Zip: Lumberton, Robeson County, North Carolina 28358
Mailing Address: 2100 Southbridge Parkway, Suite 540
City, State, Zip: Birmingham, AL 32509

Application Number: 7800166.17C
Complete Application Date: October 27, 2017 and as amended on June 23, 2021

Division of Air Quality,
Regional Office Address: Fayetteville Regional Office
Systel Building
225 Green Street, Suite 714
Fayetteville, North Carolina, 28301

Permit issued this the 23rd day of May, 2022.

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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SECTION 4: GENERAL PERMIT CONDITIONS

ATTACHMENTS

Acid Rain Permit Application dated January 23, 2017

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
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
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM_{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-1A and ES-1B CAM GACT JJJJJ NSPS Db PSD BACT SB3 BACT	Two non-CISWI* subject wood/ poultry litter/ poultry cake-fired steam/electric generating, boilers (215 million Btu per hour heat input each) including over-fire air systems and eggshells (2 tons per hour maximum usage rate, per boiler)	CD-1A3 and CD-1B3	Two selective non-catalytic reduction systems
		CD-1A2 and CD-1B2	Two multiclones (20, 24-inch diameter tubes, each)
		CD-1C4	One dry sorbent injection system using sodium bicarbonate, sodium sesquicarbonate (trona), or hydrated lime
		CD-1C	One bagfilter (14,820 square feet of filter area)
ES-15	One 10,000-gallon aqueous ammonia storage tank	N/A	N/A
ES-17, ES-18, ES-19 PSD BACT	Three biomass belt dryers, with maximum capacity of 30 tons per hour, each	N/A	N/A
ES-21 [‡]	One biomass belt dryer, with maximum capacity of 30 tons per hour	N/A	N/A
ES-22 [‡]	One natural gas-fired drum dryer equipped with low NOx burners (33 tons per hour maximum drying capacity, 66.2 million Btu per hour maximum heat input capacity)	CD-6 [‡]	One multi-cyclone (10 tubes, each tube 60 inches in diameter)
		CD-7 [‡]	One natural gas-fired regenerative thermal oxidizer (1.0 million Btu per hour heat input capacity)
ES-23	Fly ash storage pile	N/A	N/A

* CISWI = Commercial/Industrial Solid Waste Incineration. Non-CISWI subject wood means wood which is not a solid waste as defined in 40 CFR 258.2, pursuant to 40 CFR 241.2.

‡ Pursuant to application 7800166.16I, these emission sources and control devices (**ID Nos. ES-21, ES-22, CD-6, and CD-7**) are listed as a 15A NCAC 02Q .0501(b)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Two non-CISWI subject wood/poultry litter /poultry cake-fired boilers including over-fire air systems and egg shells (ID Nos. ES-1A and ES-1B) and associated selective non-catalytic reduction systems (ID Nos. CD-1A3 and CD-1B3), multiclones (ID Nos. CD-1A2 and CD-1B2), a dry sorbent injection system (ID No. CD-1C4), and a bagfilter (ID No. CD-1C)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<p><i>For firing non-CISWI subject wood and poultry litter</i></p> <p>0.30 pounds per million Btu heat input</p> <p><i>For firing non-CISWI subject wood, poultry litter, and poultry cake</i></p> $E = [(0.30)(Q_w) + (0.23)(Q_o)]/Q_t$ <p>Where: E = emission limit (lb PM/million Btu) Q_w = actual wood heat input rate (million Btu per hour) Q_o = actual other fuel heat input rate (million Btu per hour) Q_t = actual total heat input (i.e. Q_t = Q_w + Q_o)</p>	15A NCAC 02D .0504
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Particulate matter	Particulate matter emissions (filterable): 0.030 lb /million Btu heat input	15A NCAC 02D .0524 [40 CFR 60 Subpart Db]
Visible emissions	Visible emissions: 20 percent	
Carbon monoxide Sulfuric acid mist	<p><i>When burning non-CISWI subject wood only</i></p> <p>Carbon monoxide: 0.45 lb/million Btu Sulfuric acid mist: 0.011 lb/million Btu</p>	15A NCAC 02D .0530
Carbon monoxide Sulfuric acid mist PM/PM ₁₀ PM _{2.5} Sulfur dioxide Nitrogen oxides Volatile organic compounds	<p><i>When burning non-CISWI subject wood and poultry litter</i></p> <p>See Section 2.1 A.5</p>	15A NCAC 02D .0530
Particulate Matter PM ₁₀	Compliance Assurance Monitoring	15A NCAC 02D .0614 [40 CFR 64]
Hazardous air pollutants	Work practice standards	15A NCAC 02D .1111 [40 CFR 63 Subpart JJJJJ]

Pollutant	Limits/Standards	Applicable Regulation
PM/PM ₁₀ PM _{2.5} Sulfur dioxide Nitrogen oxides Volatile organic compounds Mercury	State-enforceable only <i>When burning non-CISWI subject wood only</i> See Section 2.1 A.8	Senate Bill 3 (Session Law 2007-397)
Lead Mercury	State-enforceable only <i>When burning non-CISWI subject wood and poultry litter</i> See Section 2.1 A.9	Senate Bill 3 (Session Law 2007-397)
Hazardous air pollutants	Less than 10 tons of any single HAP and 25 tons of combined HAP per consecutive 12-month period See Section 2.2 A.1	15A NCAC 02Q .0317 [MACT Avoidance]
Sulfur dioxide Nitrogen oxides	Phase II Acid Rain Permit Requirements See Section 2.3	15A NCAC 02Q .0402
Nitrogen oxides Sulfur dioxide	Cross State Air Pollution Rule [CSAPR] Requirements See Section 2.4	40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC

1. 15A NCAC 02D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of non-CISWI subject wood and poultry litter that are discharged from these boilers (**ID Nos. ES-1A and ES-1B**) into the atmosphere shall not exceed 0.30 pounds per million Btu heat input.
- b. Emissions of particulate matter from the non-CISWI subject wood, poultry litter, and poultry cake that are discharged from these boilers (**ID Nos. ES-1A and ES-1B**) into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation:

$$E_c = [(0.30)(Q_w) + (0.23)(Q_o)]/Q_t$$

Where;

- E_c = emission limit for combined firing (pound per million Btu);
- Q_w = actual wood heat input including woodwaste;
- Q_o = actual heat input other than wood heat input; and
- Q_t = Q_w + Q_o

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 the limit given in Sections 2.1 A.1.a and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.
- d. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with emission limits in Sections 2.1 A.1.a and b by conducting source testing in accordance with a testing protocol approved by the DAQ. Unless another date is approved in advance by the DAQ, the source testing shall be conducted and test results submitted within 180 days of startup of the boilers (**ID Nos. ES-1A and ES-1B**) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021. If the tests are not conducted or the results of the tests are above the emission limits given in Sections 2.1 A.1.a and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

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

- e. Particulate matter emissions from each boiler (**ID Nos. ES-1A and ES-1B**) shall be controlled by a dedicated multiclone (**ID Nos. CD-1A2 and CD-1B2**) and a common bagfilter (**ID No. CD-1C**). 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 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 following the initial inspection) internal inspection of the control devices' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the ductwork, multiclones, and bagfilter are not inspected and maintained.

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

- f. 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 multiclones and bagfilter;
 - iv. any variance from manufacturer's recommendations, if any, and corrections made; and
 - v. any period of boiler down time shall be noted in the logbook.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not maintained.

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

- g. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multiclones or bagfilter.
- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.1.e and f above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these boilers (**ID Nos. ES-1A and ES-1B**) 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.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of non-CISWI subject wood and/or poultry litter/poultry cake blend in these boilers (**ID Nos. ES-1A and ES-1B**).

**3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR Part 60, Subpart Db)**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart Db "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" including Subpart A "General Provisions."

Emission Standards [40 CFR 60.43b and 60.44b]

- b. For these boilers (**ID No. ES-1A and ES-1B**), the Permittee shall comply with the following emission standards:
 - i. The Permittee shall not cause to be discharged into the atmosphere any gases that contain PM (filterable) in excess of 0.030 lb /million Btu heat input [40 CFR 60.43b(h)(1)].
 - ii. The Permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity [40 CFR 60.43b(f)].
 - iii. The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction [40 CFR 60.43b(g)].

Testing [15A NCAC 02Q .0508(f) and 40 CFR 60.46b]

- c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct an initial performance test to determine compliance with the PM emission limits as specified in Section 2.1. A.3.b above. In accordance with 40 CFR 60.8, the Permittee shall conduct the initial performance test for PM emissions within 60 days after achieving the maximum production rate while firing poultry litter in the boilers, but not later than 180 days of startup of the boilers (**ID Nos. ES-1A and ES-1B**) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021. Testing shall be conducted following procedures and reference methods in 40 CFR 60.46b(d) (1) through (7) and in accordance with 15A NCAC 2D .2600.
- d. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct subsequent performance tests for PM emissions within 60 days of the date that the percentage of poultry litter firing exceeds 50 percent, 70 percent and 90 percent of total heat input to the boilers (**ID Nos. ES-1A and ES-1B**). Testing shall be conducted following procedures and reference methods in 40 CFR 60.46b(d) (1) through (7) and in accordance with 15A NCAC 02D .2600. The Permittee shall conduct a retest within 30 days of the test date, if the PM emission limit in Section 2.1 A.3.b is exceeded.
- e. The Permittee shall be deemed in noncompliance with 02D .0524 if the testing requirements in Sections 2.1 A.3.c and d. are not met or if the PM emission limit in Section 2.1 A.3.b is exceeded.

Notification Requirements [40 CFR 60.49b (a)]

- f. As required by 40 CFR 60.49b, the Permittee notified the Regional Supervisor, DAQ, in writing on October 30, 2015, of the actual date of initial firing of poultry litter blend in the boilers, which occurred on October 16, 2015.

Monitoring [40 CFR 60.48b]

- g. The Permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. [40 CFR 60.48b(a)]
- h. The Permittee shall follow procedures under 40 CFR 60.13 for installation, evaluation, and operation of the COMS. The span value for the COMS shall be between 60 and 80 percent. [40 CFR 60.48b(e)]
- i. The Permittee shall be deemed in noncompliance with 02D .0524 if the monitoring requirements in Sections 2.1 A.3.g and h are not met or if the opacity standard in Section 2.1 A.3.b is exceeded.

Recordkeeping [40 CFR 60.49b]

- j. The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for each fuel for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)]
- k. The Permittee shall maintain records of opacity. [40 CFR 60.49b(f)]
- l. The Permittee shall maintain all records for a period of 2 years following the date of such record [40 CFR 60.49b(o)].
- m. The Permittee shall be deemed in noncompliance with 02D .0524 if the recordkeeping requirements under Sections 2.1 A.4.j through l are not met.

Reporting [40 CFR 60.46b, 15A NCAC 02Q .0508(f)]

- n. The Permittee shall submit excess emission reports for any excess emissions of opacity that occurred during the reporting period. Excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under 40 CFR 60.43b(f). The Permittee shall submit semiannual excess emissions and monitoring systems performance reports, calculated on a quarterly basis, postmarked on or before January 30 for the reporting period between July 1 and December 31 and postmarked on or before July 30 for the reporting period between January 1 through June 30. [40 CFR 60.49b(h), 40 CFR 60.49b(w)].
- o. The Permittee shall submit a summary report of the monitoring and recordkeeping activities, given in Sections 2.1 A.3.g through m above, 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.

4. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

When burning non-CISWI subject wood only in boilers (ID Nos. ES-1A and ES-1B)

- a. The following Best Available Control Technology (BACT) limits shall not be exceeded:

Emission Source	Pollutants	Emission Limit*	Control Technology
Boilers (ID Nos. ES-1A and ES-1B)	Carbon monoxide	0.45 lb/million Btu [stack test: 3-run average]	good combustion control
	Sulfuric acid mist	0.011 lb/million Btu [stack test: 3-run average]	use of low sulfur wood

* These BACT emission limits shall apply to each source (ID Nos. ES-1A and ES-1B) and at all times except during the following: Emissions resulting from start-up, shutdown or malfunction above those given in Section 2.1 A.4.a are permitted provided that optimal operational practices are adhered to and periods of excess emissions are minimized.

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 .0530.
- c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with emission limits for CO and sulfuric acid mist in Sections 2.1 A.1.a above by conducting source testing in accordance with a testing protocol approved by the DAQ. Unless another date is approved in advance by the DAQ, the source testing shall be conducted and test results submitted within 180 days of startup of the boilers (ID Nos. ES-1A and ES-1B) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021. If the test is not conducted or the results of the test are above the emission limits given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- d. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- e. No monitoring, recordkeeping, or reporting shall be required for emissions of CO and sulfuric acid mist from these boilers (ID Nos. ES-1A and ES-1B).

5. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

When burning non-CISWI subject wood and poultry litter

- a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded for these boilers (ID Nos. ES-1A and ES-1B) when firing non-CISWI subject wood and poultry litter:

Pollutants	Control Technology or Work Practice	BACT Emission Limit	Averaging Period
Carbon monoxide	Good combustion practices	0.65 lb/million Btu per boiler	30-day rolling average as measured via CEMS
		208.8 lb/hr (startup and shutdown when one boiler is idle)	3-hour rolling average as measured via CEMS
		526.2 lb/hr (startup and shutdown when both boilers are operating)	3-hour rolling average as measured via CEMS
Volatile organic compounds	Good combustion practices	0.03 lb/million Btu per boiler	3-hour average as measured via stack test
Nitrogen oxides	Selective non-catalytic reduction	0.17 lb/million Btu per boiler	30-day rolling average as measured via CEMS
		11.2 lb/hr (startup and shutdown when one boiler is idle)	3-hour rolling average as measured via CEMS

Pollutants	Control Technology or Work Practice	BACT Emission Limit	Averaging Period
		39.2 lb/hr (startup and shutdown when both boilers are operating)	3-hour rolling average as measured via CEMS
Sulfur dioxide	Dry sorbent injection	0.16 lb/million Btu per boiler	30-day rolling average as measured via CEMS
Sulfuric acid (H ₂ SO ₄) mist (SAM)	Dry sorbent injection	0.027 lb/ million Btu per boiler	3-hour average as measured via stack test
Particulate matter (filterable only)	Multiclone and baghouse	0.030 lb/ million Btu per boiler	3-hour average as measured via stack test
PM ₁₀ (filterable and condensible)	Multiclone and baghouse	0.036 lb/ million Btu per boiler	3-hour average as measured via stack test
PM _{2.5} (SAM, filterable, and condensible)	Multiclone and baghouse	0.027 lb/ million Btu per boiler	3-hour average as measured via stack test
CO _{2e}	Good combustion practices	438,825 tons/yr	Rolling 12-month average

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.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emissions limits for sulfuric acid mist and PM, PM₁₀, and PM_{2.5} in Section 2.1 A.5.a above, by conducting a performance test while firing a minimum of 30 percent poultry litter blend in the boilers (**ID Nos. ES-1A and ES-1B**). Testing shall be conducted accordance with a testing protocol approved by the DAQ. Unless another date is approved in advance by the DAQ, the source testing shall be conducted and test results submitted within 180 days of startup of the boilers (**ID Nos. ES-1A and ES-1B**) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021. If the source test is not conducted or if the results of this test are above any limit given in Section 2.1 A.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- d. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct subsequent performance tests for compliance with emissions limits for sulfuric acid mist and PM, PM₁₀, and PM_{2.5} in Section 2.1 A.5.a above within 60 days of the date that the percentage of poultry litter firing exceeds 50 percent, 70 percent, and 90 percent of total heat input to the boilers (**ID Nos. ES-1A and ES-1B**). If the source tests are not conducted or if the results of the tests are above any limit given in Section 2.1 A.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping for CO, NO_x, and SO₂ [15A NCAC 02Q .0508 (f)]

- e. For the purposes of determining compliance with the BACT emission limits in Section 2.1 A.5.a above, the following definitions for startup and shutdown apply:
 - i. If one boiler is in operation, startup shall end when that boiler exceeds 30,000 lb/hr steam load or at 12 hours, whichever is less.
 - ii. If both boilers are in operation, startup ends when the steam load on each boiler exceeds 30,000 lb/hr or at 12 hours, whichever is less.
 - iii. If one boiler is in operation, shutdown shall begin when that boiler falls below 30,000 lb/hr steam load and shall not exceed 12 hours.
 - iv. If both boilers are in operation, shutdown begins when the steam load on either boiler drops below 30,000 lb/hr and shall not exceed 12 hours.
- f. To ensure compliance with the CO emission limit in Section 2.1 A.5.a above, the Permittee shall install and certify a continuous emissions monitoring system (CEMS) to measure CO emissions from boilers (**ID Nos. ES-1A and ES-1B**). The CO CEMS shall be installed on the common stack and certified in accordance with Performance Specifications 4 and 6, Appendix A, 40 CFR Part 60. The CO CEMS shall meet the ongoing QA/QC requirements specified in Procedure 1, Appendix F, 40 CFR Part 60.
 - i. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and cylinder gas audits), monitor shall continuously collect data at all times that the affected source is operating.

- ii. The CO CEMS data shall be reduced as specified in 40 CFR 60.13(h)(2).
- iii. Whenever hourly CO emission data is missing, the Permittee shall substitute for each hour of data missing with the greater of either (A) or (B):
 - (A) the average of the hourly pollutant emission rates recorded by the CEMS of the hour before and the hour after the missing data period; or
 - (B) the maximum hourly pollutant emission rate of the past 720 operating hours.
- iv. The 30-day rolling average of CO emissions shall be calculated by summing all the valid hourly averages in the 30-day period, excluding startup or shutdown, with missing data filled in as specified in 2.1 A.5.f.iii above, then dividing the sum by the number of hours that the emission unit is operating. The missing data substitution procedure shall be used whenever the emission unit is operating and the CEMS is not providing valid hourly emission data.
- v. The 3-hr rolling average of CO emissions for startup or shutdown shall be calculated by summing all the valid hourly averages for each 3-hr period during startup or shutdown, with missing data filled in as specified in 2.1 A.5.f.iii above, then dividing the sum by three. The missing data substitution procedure shall be used whenever the emission unit is operating and the CEMS is not providing valid hourly emission data. When the startup or shutdown event does not have enough hours to calculate the 3-hr rolling average (i.e. when the startup or shutdown event is less than 3 hours), the 3-hr rolling average shall be calculated by looking back the required additional hours from the previous startup or shutdown event.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met or if CO emissions exceed the limits in Sections 2.1 A.5.a.

- g. To ensure compliance with the SO₂ emission limit in Section 2.1 A.5.a above, the Permittee shall monitor SO₂ emissions from boilers (**ID Nos. ES-1A and ES-1B**) using CEMS that meet the requirements of 40 CFR Part 75, except that unbiased values may be used. The 30-day rolling average of SO₂ emissions shall be calculated by summing all the valid hourly averages in the 30-day period with missing data filled in accordance with 40 CFR Part 75, then dividing the sum by the number of hours that the emission unit is operating. The missing data substitution procedure shall be used whenever the emission unit is operating and the CEMS is not providing valid hourly emission data. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met or the 30-day rolling average of SO₂ emissions exceeds the limit in Sections 2.1 A.5.a.
- h. To ensure compliance with the NO_x emission limits in Section 2.1 A.5.a above, the Permittee shall monitor NO_x emissions from boilers (**ID Nos. ES-1A and ES-1B**) using CEMS that meet the requirements of 40 CFR Part 75, except that unbiased values may be used. The CEMS data shall be averaged as follows:
 - i. The 30-day rolling average of NO_x emissions shall be calculated by summing all the valid hourly averages in the 30-day period with missing data filled in accordance with 40 CFR Part 75, then dividing the sum by the number of hours that the emission unit is operating. The missing data substitution procedure shall be used whenever the emission unit is operating and the CEMS is not providing valid hourly emission data.
 - ii. The 3-hr rolling average of NO_x emissions for startup or shutdown shall be calculated by summing all the valid hourly averages for each 3-hr period during startup or shutdown, with missing data filled in 40 CFR Part 75, then dividing the sum by three. The missing data substitution procedure shall be used whenever the emission unit is operating and the CEMS is not providing valid hourly emission data. When the startup or shutdown event does not have enough hours to calculate the 3-hr rolling average (i.e. when the startup or shutdown event is less than 3 hours), the 3-hr rolling average shall be calculated by looking back the required additional hours from the previous startup or shutdown event.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met or the NO_x emissions exceed the limits in Sections 2.1 A.5.a.

- i. For the CO, NO_x, and SO₂ CEMS required in Sections 2.1 A.5.f, g, and h above, the monitor downtime shall not exceed 5 percent of the operating time in a calendar quarter and shall be calculated using the following equation:

$$\%MD = \left(\frac{\text{Total Monitor Downtime}}{\text{Total Source Operating Time}} \right) \times 100$$

Where:

“%MD” means Percent Monitor downtime for the calendar quarter.

“Total Monitor Downtime” means the number of hours in a calendar quarter where an emission source was operating but data from the associated CEMS are invalid, not available, and/or filled with the missing data procedure.

“Total Source Operating Time” means the number of hours in a calendar quarter where the emission source associated with the CEMS was operating.

“Calendar Quarter” means the three-month period between January and March, April and June, July and September, and October and December

The Permittee shall be deemed in noncompliance with 02D .0530 if these monitoring requirements are not met.

- j The Permittee shall monitor volumetric flow from the boilers (**ID Nos. ES-1A and ES-1B**) using a flow monitor that meets the requirements of 40 CFR Part 75, except that unbiased data may be used (missing data shall be filled in accordance with 40 CFR Part 75). The flow monitor shall not exceed 5 percent monitor downtime as specified in Section 2.1 A.5.i above. If the volumetric flow meter does not comply with these requirements, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- k. To ensure compliance with VOC emission limit in Section 2.1 A.5.a above, the Permittee shall follow the monitoring and recordkeeping requirements in Section 2.1 A.7.h through k below for 40 CFR Part 63 Subpart JJJJJ. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Monitoring/Recordkeeping for Sulfuric Acid Mist [15A NCAC 02Q .0508 (f)]

- l. No monitoring or recordkeeping shall be required for emissions of sulfuric acid mist from boilers (**ID Nos. ES-1A and ES-1B**).

Monitoring/Recordkeeping for PM, PM₁₀, and PM_{2.5} [15A NCAC 02Q .0508 (f)]

- m. To ensure compliance with PM, PM₁₀, and PM_{2.5} emission limits in Section 2.1 A.5.a above, the Permittee shall follow the monitoring and recordkeeping requirements in Section 2.1 A.1.e and f above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the bagfilter is not inspected and maintained or if the associated records are not maintained.

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

- n. The Permittee shall use current AP-42 emission factors and fuel usage to determine GHG emissions (as CO₂e) from the boilers (**ID Nos. ES-1A and ES-1B**) on a monthly basis, or as otherwise approved by NC DAQ. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the emissions of GHG are not recorded on a monthly basis or if the emissions of GHG exceed the limits in Section 2.1 A.5.a above.

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

- o. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- p. In order to ensure compliance with startup scenarios used in the PSD modeling, the Permittee shall fire no more than 500 gallons of No. 2 fuel oil in the boilers (**ID Nos. ES-1A and ES-1B**) during a consecutive 12-month period. The Permittee shall only fire No. 2 fuel oil during periods of start-up of the boilers and shall generate no electricity while firing No. 2 fuel oil in the boilers. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.
- q. The Permittee shall record the following in logbook (written or electronic) in reference to No. 2 fuel oil usage:
 - i. The date and time of each startup when No. 2 fuel oil was fired in the boilers.
 - ii. The amount in gallons of No. 2 fuel oil used during startup.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained or the fuel usage exceeds the limit in Section 2.1 A.5.p above.

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

- r. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.5.f through q above, 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. The monthly GHG emissions (CO₂e basis) 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.
 - ii. The monthly fuel usage of No. 2 fuel oil fired in the boilers (**ID Nos. ES-1A and ES-1B**) and the total fuel usage over the previous 12-month period.

- iii. An excess emissions and continuous monitoring system performance summary report. The report shall use the form and content set forth in 40 CFR 60.7(d).
- iv. All instances of deviations from the requirements of this permit must be clearly identified.
- s. Reporting requirements for PM emissions from the boilers (**ID Nos. ES-1A and ES-1B**) in Section 2.1 A.1.h above shall be sufficient to ensure compliance with PM, PM₁₀, and PM_{2.5} BACT limits.
- t. No reporting is required for emissions of VOC or sulfuric acid mist.

6. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the conditions below for the two boilers (**ID Nos. ES-1A and ES-1B**) controlled by two multiclones (**ID Nos. CD-1A2 and CD-1B2**) and a bagfilter (**ID No. CD-1C**).

Emission Limitations/Standards

- b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	<p><i>For firing non-CISWI subject wood and poultry litter</i></p> <p>0.30 pounds per million Btu heat input</p> <p><i>For firing non-CISWI subject wood, poultry litter, and poultry cake</i></p> <p>$E = [(0.30)(Q_w) + (0.23)(Q_o)]/Q_t$</p> <p>Where: E = emission limit (lb PM/million Btu) Q_w = actual wood heat input rate (million Btu per hour) Q_o = actual other fuel heat input rate (million Btu per hour) Q_t = actual total heat input (i.e. Q_t = Q_w + Q_o)</p>	15A NCAC 02D .0504
	<p><i>For firing non-CISWI subject wood and poultry litter</i></p> <p>0.030 pounds per million Btu heat input per boiler (filterable only), (stack test: 3, 1- hour run average)</p>	15A NCAC 02D .0530
PM10	<p><i>For firing non-CISWI subject wood and poultry litter</i></p> <p>0.036 pounds per million Btu heat input per boiler (stack test: 3, 1- hour run average)</p>	15A NCAC 02D .0530

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

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

Measure	Indicator
Measurement Approach [64.6(c)(1)(ii)]	Opacity is indicated by a continuous opacity monitoring system (COMS)
Indicator Range [64.6(c)(2)]	An excursion is defined as a 3-hour block average value of opacity greater than 12 percent.
Quality Improvement Plan (QIP) Threshold [64.8]	Four excursions, as defined above, within any 6-month period.

Measure	Indicator
QA/QC Practices and Criteria [64.3(b)(3)]	The COMS shall be calibrated, maintained and operated according to 40 CFR 60, Appendix B, Performance Specification 1 and Appendix F, Procedure 3.
Monitoring Frequency [64.3(b)(4)]	Opacity is continuously monitored while the bagfilter (ID No. CD-1C) is in operation.
Data Averaging Period [64.3(b)(4)]	3-hour block average of 6-minute averages starting at midnight each day. (Total of eight 3-hour block periods)

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

- d. For any excursion, the Permittee shall initiate an inspection of the control equipment and/or the COMS and initiate the repairs as necessary. The following corrective actions shall be taken as soon as practical:
 - i. Identify cause of excursion.
 - ii. Initiate actions to correct the cause of any excursions identified in Section 2.1 A.6.d.i above. Repair equipment that is not operating properly.
 - iii. Initiate work order for baghouse inspection and repair as needed for any equipment that cannot be repaired during operation.
 - iv. Document nature and cause of excursions in operations log.
 - v. Improve preventative maintenance procedures as necessary in accordance with CAM QIP (if one exists).
 - vi. Provide notification to DAQ in accordance with reporting requirements in the Section 2.1 A.7.e below.
 If the above monitoring and recordkeeping is not performed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614.
- e. The Permittee shall retain records of recorded COMS data, each excursion report, and each corrective action taken. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these records are not retained.

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

- f. The Permittee shall submit a summary report of all monitoring activities given in Sections 2.1 A.6.c postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:
 - i. company name, address and facility ID number,
 - ii. a statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report,
 - iii. the date of report and beginning and ending dates of the reporting period,
 - iv. a statement that there were no excursions outside of the allowable operating parameter limits during the reporting period (as applicable), and that no continuous opacity monitoring system (COMS) was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted. Or for each exceedance of an allowable operating parameter that occurs, the compliance report must contain:
 - (A) the total operating time of the source during the reporting period,
 - (B) information on the number, duration, and cause of exceedances (including unknown cause), if applicable, and the corrective action taken and
 - (C) information on the number, duration, and cause (including unknown cause, if applicable) for COMS downtime incidents, other than downtime associated with zero and span and other daily calibration checks.
 - (D) a description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

7. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart JJJJJ)

Applicability [40 CFR 63.11193, 63.11194(a)(1), (b), 63.11200(b)]

- a. For these emission sources (existing boilers in the biomass subcategory; **ID Nos. ES-1A and ES-1B**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR Part 63, Subpart JJJJJ, "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 JJJJJ.

Compliance Dates [40 CFR 63.11196, 40 CFR 63.11210]

- d. The boilers (**ID Nos. ES-1A and ES-1B**) did not operate between the effective date of 40 CFR 63 Subpart JJJJJ and the compliance date of March 21, 2014. In accordance with 40 CFR 63.11210(k)(2), the Permittee shall complete the initial performance tune-up, no later than 30 days after the re-start of the affected boiler on solid fossil fuel, biomass, or liquid fuel. The Permittee met this requirement for boiler ES-1A on September 24, 2015 and for boiler ES-1B on September 18, 2015. [40 CFR 63.11196(a)(1), 63.11210(c) and (k)(2)]
- e. The Permittee shall comply with the energy assessment requirement no later than March 21, 2014. This assessment was performed for boilers (**ID Nos. ES-1A and 1B**) on April 17, 2014. [40 CFR 63.11196(a)(3)]

Notification of Compliance Status [40 CFR 63.11225]

- e. The Permittee shall submit a Notification of Compliance Status no later than January 22, 2016, which is 120 days after completion of the initial tune-ups pursuant to 40 CFR 63.11225(a)(4). The Permittee met this requirement on April 26, 2016.

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

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

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

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

[40 CFR 63.11201(b), Table 2, 40 CFR 63.11223(a), (b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements in this paragraph are not met.

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

- i. The Permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. This assessment was performed for boilers (**ID Nos. ES-1A and 1B**) on April 17, 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 keep the following records to document conformance with the performance tune-ups:
 - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - (B) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (C) A description of any corrective actions taken as a part of the tune-up of the boiler.
 - (D) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
 - iii. The Permittee shall keep a copy of each boiler energy assessment report.
 - iv. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
 - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 2.1 A.7.g, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
 - vi. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the Permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the Permittee 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), the Permittee 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, the Permittee must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).

[40 CFR 63.11225(c), 63.11223(b)(6)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

- k. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

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

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

State-enforceable only

8. SENATE BILL 3 (Session Law 2007-397)

When burning non-CISWI subject wood only in boilers (ID Nos. ES-1A and ES-1B)

- a. The following Best Available Control Technology (BACT) limits shall not be exceeded:

EMISSION SOURCE	POLLUTANT	EMISSION LIMITS*	CONTROL TECHNOLOGY
Boilers (ID Nos. ES-1A and ES-1B)	PM/PM ₁₀	0.036 lb/million Btu (both filterable and condensable) [stack test: 3-run average]	multiclone and bagfilter
	PM _{2.5}	0.011 lb/million Btu (both filterable and condensable [organic and inorganic including sulfuric acid mist]) [stack test: 3-run average]	multiclone and bagfilter
	Sulfur dioxide	0.025 lb/million Btu [CEM: 30-day rolling average]	use of low sulfur wood
	Nitrogen oxides	0.125 lb/million Btu [CEM: 30-day rolling average]	selective non-catalytic reduction
	Volatile organic compounds	0.03 lb/million Btu [stack test: 3-run average]	good combustion control
	Mercury	5 x 10 ⁻⁶ lb/million Btu [stack test: 3-run average]	bagfilter

* These BACT emission limits shall apply to each source (ID Nos. ES-1A and ES-1B) and at all times except during the following: Emissions resulting from start-up, shutdown or malfunction above those given in Section 2.1 A.8.a are permitted provided that optimal operational practices are adhered to and periods of excess emissions are minimized.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.
- c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with emission limits in Section 2.1 A.8.a above by conducting source testing in accordance with a testing protocol approved by the DAQ. Unless another date is approved in advance by the DAQ, the source testing shall be conducted and test results submitted within 180 days of startup of the boilers (ID Nos. ES-1A and ES-1B) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021.

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

- d. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- e. The Permittee shall monitor NO_x and SO₂ emissions from boilers (ID Nos. ES-1A and ES-1B) using continuous emissions monitoring systems (CEMS) that meet the requirements of 40 CFR Part 75, except that unbiased values may be used and no missing data substitution procedures are required. The BACT emission limits are based on 30-day rolling average calculated according to the following:
 - i. The 30-day rolling average shall be calculated by summing all the valid hourly averages in the 30-day period, and the sum shall be divided by the number of valid hourly averages. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75.
 - ii. For the purposes of determining the 30-day rolling average, the Permittee shall not use data collected during periods of startup, shutdown, or malfunction.
 - (A) If one boiler is in operation, startup shall end when that boiler exceeds 30,000 lb/hr steam load or 12 hours, whichever is less.
 - (B) If both boilers are in operation, startup ends when the steam load on each boiler exceeds 30,000 lb/hr or 12 hours, whichever is less.
 - (C) If one boiler is in operation, shutdown shall begin when that boiler falls below 30,000 lb/hr steam load.
 - (D) If both boilers are in operation, shutdown begins when the steam load on either boiler drops below 30,000 lb/hr.
 - iii. Compliance averages shall be based on all available quality-assured hourly data not to exceed the past four calendar quarters, excluding missing data or data that has been bias adjusted.

- f. Monitoring and recordkeeping requirements for PM emissions from boilers (**ID Nos. ES-1A and ES-1B**) in Sections 2.1 A.1.e and f above shall be sufficient to ensure compliance with PM/PM₁₀, PM_{2.5} and mercury BACT under Senate Bill 3 (Session Law 2007-397).
- g. No monitoring/recordkeeping shall be required for VOC emissions from boilers (**ID Nos. ES-1A and ES-1B**).

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

- h. Reporting requirement for PM emissions from boilers (**ID Nos. ES-1A and ES-1B**) in Section 2.1 A.1.h above shall be sufficient to ensure compliance with PM/PM₁₀, PM_{2.5} and mercury BACT under Senate Bill 3 (Session Law 2007-397).
- i. The Permittee shall submit excess emission reports for any excess emissions of NO_x and SO₂ that occurred during the reporting period. Excess emissions are defined as all 30-day rolling average during which the average NO_x and SO₂ exceeds the emission standards in Sections 2.1 A.8.a above. The Permittee shall submit semiannual excess emissions and monitoring systems performance reports calculated on a quarterly basis, postmarked on or before January 30 for the reporting period between July 1 and December 31 and postmarked on or before July 30 for the reporting period between January 1 through June 30.
- j. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.8.d through f, 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. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

9. SENATE BILL 3 (Session Law 2007-397)

When burning non-CISWI subject wood and poultry litter in boilers (ID Nos. ES-1A and ES-1B)

- a. The following Best Available Control Technology (BACT) limits shall not be exceeded:

Emission Source	Pollutant	Emission Limits	Control Technology
Boilers (ID Nos. ES-1A and ES-1B)	Lead	2.86 x 10 ⁻⁵ lb/million Btu [stack test: 3-run average]	Multiclone and baghouse
	Mercury	5 x 10 ⁻⁶ lb/million Btu [stack test: 3-run average]	Multiclone and baghouse

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

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emissions limits for mercury and lead as specified in Section 2.1 A.9.a above, by conducting a performance test while firing a minimum of 30 percent poultry litter blend in boilers (**ID Nos. ES-1A and ES-1B**). Testing shall be conducted in accordance with a testing protocol approved by the DAQ. Unless another date is approved in advance by the DAQ, the source testing shall be conducted and test results submitted within 180 days of startup of the boilers (**ID Nos. ES-1A and ES-1B**) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emissions limits for mercury and lead as specified in Section 2.1 A.9.a above, by conducting a performance test within 60 days of the date that the percentage of poultry litter firing exceeds 50 percent, 70 percent, and 90 percent of total heat input to the boilers (**ID Nos. ES-1A and ES-1B**).

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

- d. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- e. Monitoring/recordkeeping/reporting requirements for PM emissions from boilers (**ID Nos. ES-1A and ES-1B**) in Sections 2.1 A.1.e through h above shall be sufficient to ensure compliance with mercury and lead BACT under Senate Bill 3 (Session Law 2007-397).

B. One 10,000-gallon aqueous ammonia storage tank (ID No. ES-15)

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

Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	State-enforceable only 0.99 lb/hr of ammonia	15A NCAC 02D .1100

State-enforceable only

1. **15A NCAC 02D .1100 CONTROL OF TOXIC AIR POLLUTANTS**

- a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Sources	Pollutants	Emission Rates
Aqueous Ammonia Storage Tank (ID No. ES-15)	Ammonia	0.99 lb/hr

Testing [15A NCAC 02D .1105]

- b. No testing is required.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .1105]

- c. No monitoring, recordkeeping, or reporting is required for compliance with 15A NCAC 02D .1100.

C. Four biomass belt dryers (ID Nos. ES-17, ES-18, ES-19, and ES-21)

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

Pollutant	Limits/Standards	Applicable Regulation
Volatile Organic Compounds	<i>For ID Nos. ES-17, ES-18, and ES-19 only</i> No control	15A NCAC 02D .0530
Volatile Organic Compounds	<i>For ID No. ES-21 only</i> Less than 40 tons of VOC per consecutive 12-month period	15A NCAC 02Q .0317 [PSD Avoidance]
N/A	<i>For ID No. ES-21 only</i> Option for obtaining construction and operation permit	15A NCAC 02Q .0504
Hazardous Air Pollutants	Less than 10 tons of any single HAP and 25 tons of combined HAP per consecutive 12-month period See Section 2.2 A.1	15A NCAC 02Q .0317 [MACT Avoidance]

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (PSD) BACT

- a. For the three biomass belt dryers (**ID Nos. ES-17, ES-18, and ES-19**), BACT for VOC emissions has been determined to be no controls.

2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS FOR 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of this regulation, the biomass belt dryer (**ID No. ES-21**) shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.

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

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

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

- c. The Permittee shall maintain records of the throughput of material dried by the belt dryer (**ID No. ES-21**). The throughput shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the throughput is not monitored or the records maintained.
- d. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of material dried by the belt dryer per month by the 0.101 pounds of VOC per ton of material dried in the biomass belt dryer (**ID No. ES-21**). This emission factor was developed from site specific testing on August 22 and 23, 2018. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions are not monitored or if the amount of VOC emissions exceed the limit in Section 2.1 C.2.a above.
- e. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions are not recorded.

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

- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 C.2.c through e above 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 monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

3. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

- a. Pursuant to 15A NCAC 02Q .0501(b)(2), for completion of the two-step significant modification process initiated by Application No. 7800166.16I, the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of this emission source (**ID No. ES-21**).

Reporting [15A NCAC 02Q .0308(a)]

- b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of the biomass belt dryer **(ID Nos. ES-21)**, postmarked no later than 30 days after such date.

D. One natural gas-fired drum dryer (ID No. ES-22) equipped with low NOx burners and a multi-cyclone (ID No. CD-6) in series with a regenerative thermal oxidizer (ID No. CD-7)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour $E = 55.0 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pound per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds and Particulate matter	Operate control devices at all times; Perform regular maintenance of control devices. See Section 2.1 D.4	15A NCAC 02D .0611
N/A	Option for obtaining construction and operation permit	15A NCAC 02Q .0504
Hazardous air pollutants	Less than 10 tons of any single HAP and 25 tons of combined HAP per consecutive 12-month period See Section 2.2 A.1	15A NCAC 02Q .0317 [MACT avoidance]

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

- a. Emissions of particulate matter from this source (ID No. ES-22) shall not exceed an allowable emission rate as calculated by the following equations:

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

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

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 D.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 these emission sources shall be controlled by the multi-cyclone (ID No. CD-5) as described above. 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 a monthly external inspection of the ductwork and cyclones noting the 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.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

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

- e. 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.
- f. The Permittee shall submit a summary report of the monitoring and recordkeeping given in Sections 2.1 D.1.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide, when burning natural gas in this source (**ID No. ES-22**), 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 limits given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from burning of natural gas in this source (**ID No. ES-22**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-22**) 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 D.3.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 (**ID No. ES-22**) for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for this source in the first 30 days of beginning operation. 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 D.3.a above.The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required weekly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if "normal" is not established for this source (**ID No. ES-22**) in the first 30 days of beginning operation.

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

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

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 D.3.c and d above 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.

4. 15A NCAC 02D .0611: MONITORING EMISSIONS FROM OTHER SOURCES

- a. Emissions of particulate matter (PM) and volatile organic compounds (VOC) from the drum dryer (**ID No. ES-22**) shall be controlled at all times the drum dryer is operating, as described in the Permitted Emission Source List in Section 1.

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

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate the VOC destruction efficiency of the regenerative thermal oxidizer (**ID No. CD-7**) above by testing the drum dryer (**ID No. ES-22**). Details of the emissions testing and reporting requirements can be found in General Condition JJ. The testing shall be conducted within 180 days of the initial startup of the drum dryer, unless another date is approved in advance by the DAQ.
- c. If additional emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ.
- d. If the Permittee does not perform the required testing as specified in Sections 2.1 D.4.b and c, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0611.

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

- e. To ensure compliance, the Permittee shall install, operate, and maintain a continuous parameter monitoring system (CPMS) to measure and record the operating temperature of the oxidizer (**ID No. CD-7**). The CPMS shall be installed and operated based on manufacturer's specifications.
- f. The Permittee shall maintain the minimum operating temperature (3-hour rolling average) within the oxidizer (**ID No. CD-7**) while this emission source (**ID No. ES-22**) is operating.
 - i. The minimum operating temperature is 1,500 °F, or
 - ii. The Permittee may establish a different minimum operating temperature during testing of the oxidizer.
- g. To ensure compliance, the Permittee shall perform inspections and perform maintenance on the oxidizer (**ID No. CD-7**) as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include an annual (for each 12-month period following the initial inspection) internal inspection of the oxidizer and all associated ductwork.
- h. If the required monitoring activities are not performed as specified in Section 2.1 D.4.e through g, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0611.

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

- i. The Permittee shall, once per month, calculate the VOC emissions from this source (**ID No. ES-22**) for the previous operating month and the running 12-month total ending on that month. The results of the calculations shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. If these calculations are not conducted and recorded, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0611.
- j. The results of internal inspections, maintenance, and monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the oxidizer;
 - iv. any variance from manufacturer's recommendations, if any, and corrections made; and
 - v. a record of temperature measurements produced by the CPMS.

If the required records are not kept, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0611.

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

- k. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 D.4.e through j above, 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.

5. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

- a. Pursuant to 15A NCAC 02Q .0501(b)(2), for completion of the two-step significant modification process initiated by Application No. 7800166.16I, the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of the first of the natural gas-fired drum dryer (**ID No. ES-22**) or these control devices (**ID Nos. CD-6 and CD-7**).

Reporting [15A NCAC 02Q .0308(a)]

- b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of the first of the natural gas-fired drum dryer (**ID No. ES-22**) or these control devices (**ID Nos. CD-6 and CD-7**), postmarked no later than 30 days after such date.

E. Fly ash storage pile (ID No. ES-23)

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

Pollutant	Limits/Standards	Applicable Regulation
Fugitive dust	Minimize fugitive dust beyond property boundary See General Condition MM	15A NCAC 02D .0540

F. Poultry litter storage warehouse (ID No. IES-16)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10/PM2.5	Work practice standards	15A NCAC 02D .0530
Volatile Organic Compounds	No control	15A NCAC 02D .0530
Nitrous Oxides (N ₂ O)	No control	15A NCAC 02D .0530

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (PSD) BACT

- a. BACT has been determined to be no controls for emissions of N₂O and VOC from the poultry litter storage warehouse (**ID No. IES-16**).
- b. For emissions of PM, PM₁₀, and PM_{2.5}, the Permittee shall process, handle, and store poultry litter indoors as work practice standards for BACT.

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

- c. No monitoring, recordkeeping, or reporting shall be required for emissions of PM, VOC, or N₂O from the poultry litter storage warehouse (**ID No. IES-16**).

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

A. Facility-wide

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	Less than 10 tons of any single HAP and 25 tons of combined HAP per consecutive 12-month period	15A NCAC 02Q .0317 [MACT Avoidance]
Toxic air pollutants	State-enforceable only Emissions below TPERs	15A NCAC 02Q .0711
Odors	State-enforceable only Implement management practices to avoid applicability of 15A NCAC 02D .1806	15A NCAC 02D .1806(d)(11)

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

- a. In order to avoid applicability of this regulation, 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. *Boiler Testing*: Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall test the following emissions sources to establish site specific emission factors for demonstrating compliance with the emission limits in Section 2.2 A.1.a above:

Affected Sources	Pollutant	Reference Emission Factor (pounds per million Btu)	Test Method ¹
Boilers (ID Nos. ES-1A and ES-1B)	Hydrogen Chloride (HCl)	5.31E-3	DAQ Approved Method
	Chlorine	1.8E-3	

¹ Test method will be determined by DAQ approved testing protocol.

- i. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct an initial performance test for HCl and chlorine within 180 days of startup of the boilers (**ID Nos. ES-1A and ES-1B**) after completion of the boiler maintenance and replacement activities specified in the addendum to permit application no. 7800166.17C submitted on June 23, 2021, unless another date is approved in advance by the DAQ. During the test, the Permittee shall fire poultry litter at or near 30 percent of total heat input to the boilers.
- ii. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct subsequent performance tests for HCl and chlorine emissions within 60 days of the date that the percentage of poultry litter firing exceeds 50 percent, 70 percent and 90 percent of total heat input to the boilers (**ID Nos. ES-1A and ES-1B**), unless another date is approved in advance by the DAQ. The Permittee shall conduct a retest within 30 days of the test date, if the reference emission factors in 2.2 A.1.b are exceeded.
- iii. Testing of the boilers shall be conducted as specified below:
 - (A) The Permittee shall perform such testing in accordance with 15A NCAC 02D .2600.
 - (B) At least 45 days prior to performing any required emissions testing, the Permittee shall submit two copies of a testing protocol to the Regional Supervisor, DAQ, for review and approval. All testing protocols must be approved by the DAQ prior to performing such tests.
 - (C) To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall provide the Regional Office, in WRITING, at least 15 days notice of any required performance test(s).
 - (D) Two copies of the final air emission test report shall be submitted to the Regional Supervisor, DAQ, not later than 30 days after sample collection.
 - (E) The Permittee shall establish injection rate(s) of the dry sorbent injection system (**ID No. CD-1C4**) during testing. At a minimum, the Permittee shall establish an injection rate of the dry sorbent injection system while firing poultry litter at or near 30 percent of total heat input to the boilers and without addition of egg shells to the fuel mix. The Permittee may also propose testing during additional operating scenarios (e.g., firing with egg shells, firing with less poultry litter, etc.) to establish alternative injection rates for these operating scenarios.

- (F) Upon completion and approval of testing as specified in Section 2.2 A.1.b.ii, the emission factors in Section 2.2 A.1.b shall be revised with the highest HCl and chlorine emission factors measured during the testing series.
- iv. If the source tests are not performed in accordance with Sections 2.2 A.1.b.ii or b.iii or if the emission factors of HCl and chlorine exceed the reference emission factors in 2.2 A.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.
- c. *Belt Dryer Testing* – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall conduct source testing to quantify the emissions of HAPs from the biomass belt dryers (**ID Nos. ES-17, ES-18, ES-19, and ES-21**).
 - i. Testing of the belt dryers shall be conducted as specified below:
 - (A) The HAPs to be tested are acetaldehyde, acrolein, formaldehyde, methanol, phenol and propionaldehyde.
 - (B) Testing shall be conducted on any one of the biomass belt dryers (**ID Nos. ES-17, ES-18, or ES-19**).
 - (C) The Permittee shall perform such testing in accordance with 15A NCAC 02D .2600.
 - (D) At least 45 days prior to performing any required emissions testing, the Permittee shall submit two copies of a testing protocol to the Regional Supervisor, DAQ, for review and approval. All testing protocols must be approved by the DAQ prior to performing such tests.
 - (E) To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall provide the Regional Office, in WRITING, at least 15 days notice of the testing.
 - (F) The emission tests shall be conducted no later than 180 days after restart of the affected sources, unless an alternate date is approved in advance by DAQ.
 - (G) The Permittee shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate of 30 tons per hour or at a lesser rate if specified by the Director or his delegate.
 - (H) Two copies of the final air emission test report shall be submitted to the Regional Supervisor, DAQ, not later than 30 days after sample collection.
 - ii. If the source test is not performed in accordance with Section 2.2 A.1.c.i above or if HAP emissions exceed the emission limits in 2.2 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.
- d. *Dryer testing*: Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the HAP emission limits above by testing the emission rate of formaldehyde and methanol from the drum dryer (**ID No. ES-22**). Details of the emissions testing and reporting requirements can be found in General Condition JJ. The testing shall be conducted within 180 days of the initial startup of the drum dryer, unless another date is approved in advance by the DAQ. If the emission testing is not performed as specified in this paragraph, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

- e. Emissions from the boilers (**ID Nos. ES-1A and ES-1B**) are required to be controlled by the dry sorbent injection system (**ID No. CD-1C4**). To ensure compliance, the Permittee shall perform inspections and perform maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include an annual (for each 12-month period following the initial inspection) inspection of the dry reagent injection systems, including inspection of the injection nozzles, pumping systems, and associated controls. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if dry sorbent injection system is not inspected and maintained.
- f. The results of internal inspections and maintenance of the dry sorbent injection system (**ID No. CD-1C4**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the injection systems; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.
- g. To ensure proper control efficiency of the dry sorbent injection system, the Permittee shall install, operate, and maintain continuous parameter monitoring systems (CPMS) for monitoring the dry sorbent injection rate. The Permittee shall continuously monitor and record the dry sorbent injection rate when the dry sorbent injection system (**ID No. CD-1C4**) is in operation. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the CPMS are not installed or the dry sorbent injection rates are not monitored and the records are not maintained.

- h. The Permittee shall not operate the belt dryer (**ID No. ES-21**) until the source testing in Section 2.2 A.1.c.i above has been completed and facility-wide HAP emissions, calculated with the approved source testing results, demonstrate compliance with emission limits in Section 2.2 A.1.a above. If the Permittee operates the belt dryer (**ID No. ES-21**) prior to this demonstration, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111.
- i. HAP emissions from the drum dryer (**ID No. ES-22**) shall be controlled by the oxidizer (**ID No. CD-7**). To ensure compliance, the Permittee shall operate and perform maintenance on the oxidizer as required by Section 2.1 D.4.g above and conduct associated recordkeeping as required by Section 2.1 D.4.j above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the monitoring and recordkeeping requirements are not met.
- j. To ensure proper control efficiency of the oxidizer (**ID No. CD-7**) on the dryer drum (**ID No. ES-22**), the Permittee shall operate a CPMS and maintain an operating temperature as required by Sections 2.1 D.4.e and f above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the required monitor is not installed, the oxidizer temperature is not monitored or maintained, or the records are not maintained.
- k. The Permittee shall calculate emissions of HCl and chlorine from the boilers (**ID Nos. ES-1A and ES-1B**) at the end of each month and shall record the emissions monthly in a logbook, in accordance with the following formulas:

Emissions of Hydrogen Chloride

$$\text{HCl Emissions (tons/month)} = \text{EF}_{\text{HCl}} (\text{lb/mm Btu of fuel}) * [\text{non-CISWI subject wood usage (lb/month)} * \text{HHV}_{\text{wood}} (\text{Btu/ lb wood}) + \text{poultry litter usage (lb/month)} * \text{HHV}_{\text{poultry litter}} (\text{Btu/lb poultry litter}) + \text{poultry cake usage (lb/month)} * \text{HHV}_{\text{poultry cake}} (\text{Btu/lb poultry cake})] * (\text{MMBtu}/1\text{E}6 \text{ Btu}) * (\text{ton} /2000 \text{ lbs})$$

Emissions of Chlorine

$$\text{Cl Emissions (tons/month)} = \text{EF}_{\text{Cl}} (\text{lb/mm Btu of fuel}) * [\text{non-CISWI subject wood usage (lb/month)} * \text{HHV}_{\text{wood}} (\text{Btu/ lb wood}) + \text{poultry litter usage (lb/month)} * \text{HHV}_{\text{poultry litter}} (\text{Btu/lb poultry litter}) + \text{poultry cake usage (lb/month)} * \text{HHV}_{\text{poultry cake}} (\text{Btu/lb poultry cake})] * (\text{MMBtu}/1\text{E}6 \text{ Btu}) * (\text{ton} /2000 \text{ lbs})$$

Where:

- $\text{EF}_{\text{HCl}} =$ 5.31E-3 lb /MMBtu, as provided in Permit Application No. 7800116.16G. Upon completion and approval of testing as specified in Section 2.2 A.1.b.iii, the Permittee shall use the highest HCl emission factor measured during the testing series in this equation to calculate HCl emissions.
- $\text{EF}_{\text{Cl}} =$ 1.8E-3 lb / MMBtu, as provided in Permit Application No. 7800116.15B. Upon completion and approval of testing as specified in Section 2.2 A.1.b.iii, the Permittee shall use the highest chlorine emission factor measured during the testing series in this equation to calculate chlorine emissions.
- $\text{HHV}_{\text{wood}} =$ 4,730 Btu / lb of wood as reported in the wood fuel specifications from Biomass Energy Lab, as provided by the Permittee.
- $\text{HHV}_{\text{poultry litter}} =$ 4,435 Btu / lb of poultry litter as provided in DAQ’s Non-Hazardous Secondary Material Determination for Poultry Power USA, dated March 8, 2013.
- $\text{HHV}_{\text{poultry cake}} =$ 11,681 Btu / lb of poultry cake as provided in DAQ’s Applicability Determination No. 3286 – Secondary Material Determination for PHW Energy, LLC, dated September 13, 2018.
- $\text{MMBtu} =$ million Btu

- i. The Permittee shall update emission factors for HCl and Cl upon completion of the testing series as specified in Section 2.2 A.1.b.iii. If the new emission factors are higher than the reference values, the Permittee shall submit a request to revise the values in the permit at the same time the final test report in the series required pursuant to General Condition JJ is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. If the emission factors are lower than the reference values, the Permittee may request to revise the values in the permit pursuant to 15A NCAC 02Q .0515.
- ii. If the required calculations are not conducted or if the records are not maintained in a logbook (written or electronic format), the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111. If the emissions of either HCl or chlorine exceed 10 tons for any consecutive 12-month period, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.
- 1. The Permittee shall calculate and record in a logbook (written or electronic format) the monthly and consecutive 12-month total for facility-wide HAP emissions. If the facility-wide emissions of any single HAP exceed 10 tons for any consecutive 12-month period or if the facility-wide emissions of all HAPs combined exceed 25 tons for any consecutive 12-month period, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

- m. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination 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)]

- n. The Permittee shall submit a semiannual 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 from the boilers (**ID Nos. ES-1A and ES-1B**) for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.
 - ii. The facility-wide total HAP emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.
 - iii. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

2. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

- a. For each of the toxic air pollutants (TAPs) listed below, the Permittee has made a demonstration that facility-wide actual emissions from non-exempt sources do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711(a). The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711(a).
- b. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all non-exempt sources will become greater than the corresponding TPERs.
- c. Prior to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100, Control of Toxic Air Pollutants.
- d. In accordance with the approved application¹, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

TPERs Limitations				
Pollutant (CAS Number)	Carcinogens (pounds per year)	Chronic Toxicants (pounds per day)	Acute Systemic Toxicants (pounds per hour)	Acute Irritants (pounds per hour)
benzene (71-43-2)	8.1			
benzo(a)pyrene (50-32-8)	2.2			
hexane isomers (except n-hexane) (HEXANEISO)				92
toluene (108-88-3)		98		14.4

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0605 and .0611]

- e. No monitoring/recordkeeping/reporting is required to demonstrate compliance for TAP emissions from this facility.

¹ Application 7800166.16I, incorporated into Permit No. 05543T24.

State-enforceable only

3. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

Pursuant to 15A NCAC 02D 1806(d)(11), to avoid the applicability of 15A NCAC 02D .1806, "Control and Prohibition of Odorous Emissions," the Permittee shall implement the following management practices for minimizing odor from poultry litter:

- a. When poultry litter arrives on the facility's property, it shall be in adequately covered trucks;
- b. The Permittee shall utilize on-site fuel handling and management practices to minimize emissions and spillage and improve combustion conditions of the poultry litter. These practices shall include:
 - i. performing loading and off-loading procedures inside a poultry litter storage area in an expeditious manner;
 - ii. reasonably utilizing the "first in, first out" (FIFO) method for processing and using the poultry litter;
 - iii. immediately transporting loaded trucks when transferring poultry litter from storage to fuel processing; and
 - iv. not storing any poultry litter on site for more than 90 days.

- B. Biomass belt dryer (ID No. ES-17)**
- Biomass belt dryer (ID No. ES-18)**
- Biomass belt dryer (ID No. ES-19)**
- Biomass belt dryer (ID No. ES-21)**
- Drum dryer (ID No. ES-22)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State-enforceable only Modeled emission rates for formaldehyde	15A NCAC 02D .1100

State Enforceable Only

1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

- a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded.

Emission Source	Toxic Air Pollutant	Emission Limit
Biomass belt dryer (ID No. ES-17)	Formaldehyde	0.26 lb/hr
Biomass belt dryer (ID No. ES-18)	Formaldehyde	0.26 lb/hr
Biomass belt dryer (ID No. ES-19)	Formaldehyde	0.26 lb/hr
Biomass belt dryer (ID No. ES-21)	Formaldehyde	0.26 lb/hr
Drum dryer (ID No. ES-22)	Formaldehyde	0.01 lb/hr

- b. The Permittee has submitted a toxic air pollutant dispersion modeling analysis dated August 5, 2019² for the facility’s toxic air pollutant emissions as listed in the above table. The modeling analysis was reviewed and approved by the AQAB on October 30, 2019. Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.
- c. If emissions of acetaldehyde, acrolein, formaldehyde, and phenol from the biomass belt dryers (**ID Nos. ES-17, ES-18, ES-19, and ES-21**) are shown to exceed their TPERs upon completion of source testing as specified in Section 2.2 A.1.c.i above and upon approval of the source test results, the Permittee shall be responsible for obtaining an air permit demonstrating compliance with the requirements of 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” for these pollutants from all emission sources at the facility, excluding those sources exempt under 15A NCAC 02Q .0702, “Exemptions.”
- d. No testing/monitoring/recordkeeping/reporting shall be required to demonstrate compliance with 15A NCAC 02D .1100.

² The Permittee elected to include emissions sources exempted by 15A NCAC 02Q .0702(a)(27) in facility-wide air modeling conducted to demonstrate compliance with 15A NCAC 02D .1100.

2.3- Phase II Acid Rain Permit Requirements

ORIS code: 10382

Effective: September 14, 2017 until August 31, 2022

A. Statement of Basis

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

B. SO₂ Allowance Allocations and NO_x Requirements for each affected unit

Source	Pollutant	Emission Limit
Unit 1 (ES-1A)	SO ₂	SO ₂ allowances are not allocated by U.S. EPA for these units under 40 CFR Part 72.
Unit 2 (ES-1B)	NO _x	Does not apply for units that are not subject to an Acid Rain emissions limitation or reduction requirement for SO ₂ under Phase I or Phase II of the CAA as specified in 40 CFR 76.1(a).

C. Acid Rain Permit Application (attached)

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

Acid Rain Permit Application dated January 23, 2017.

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

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

2.5- Permit Shield for Non-Applicable Requirements

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

- A. The EPA's Clean Air Interstate Rules (CAIR) are not applicable to the two boilers (**ID Nos. ES-1A and ES-1B**), pursuant to 40 CFR 52.35(f) and 52.36(e). CAIR has been replaced by the Cross State Air Pollution Rule (CSAPR).
- B. The requirements of 15A NCAC 02D .2400, "Clean Air Interstate Rules" expired on February 1, 2016, and no longer apply to the two boilers (**ES-1A and ES-1B**).

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

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Source ID Nos.	Emission Source Description
IES-1 GACT ZZZZ	One diesel fired 340 hp emergency fire pump
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 turbine lube oil tank vent
IES-6	One cooling tower
IES-8	Truck dumper No. 1 for receiving biomass fuel
IES-9	Truck dumper No. 2 for receiving biomass fuel
IES-10	Fuel storage piles
IES-11	Fuel material handling including conveyors, front-end loader/dozer and other vehicular traffic in the fuel yard
IES-12	Paved roads
IES-13	One sorbent silo
IES-14	One bottom and sifting ash bunker
IES-16 PSD BACT	Poultry litter storage warehouse
IES-20	Poultry litter storage shed
IES-21	One fly ash silo with a bin vent filter

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee 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."

SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

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

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

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) 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. **Title V Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements [15A NCAC 02Q .0508(f)]
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "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.*)
2. 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.
3. 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).

I.B. Reporting Requirements for Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Permit Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. 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.C. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;

- b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

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

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

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

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

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

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

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

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]

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

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

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

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

5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

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

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

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

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

T. **Insignificant Activities** [15A NCAC 02Q .0503]

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

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

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

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

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

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

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any

such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

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

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

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

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

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

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

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

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(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

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

EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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, .1110, or .1111 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 for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, 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 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D 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 15A NCAC 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

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

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

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

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(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(c)(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 (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
 - a. The written notification shall include:
 - i. a description of the change at the facility;
 - 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.
 - b. 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 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 2 to Air Quality Permit No. 05543T29
North Carolina Renewable Power - Lumberton, LLC

Acid Rain Permit Application
(Five pages)



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application Received

For more information, see instructions and 40 CFR 72.30 and 72.31.

JAN 27 2017

This submission is: New Revised for ARP permit renewal

Air Permits Section

STEP 1

Identify the facility name, State, and plant (ORIS) code.

NCRP Lumberton, LLC Facility (Source) Name	NC State	10382 Plant Code
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STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
Unit 1 (ES-1A)	Yes
Unit 2 (ES-1B)	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

NCRP Lumberton, LLC
Facility (Source) Name (from STEP 1)

Permit Requirements

STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

NCRP Lumberton, LLC
Facility (Source) Name (from STEP 1)

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

NCRP Lumberton, LLC
Facility (Source) Name (from STEP 1)

Page 4

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

NCRP Lumberton, LLC
Facility (Source) Name (from STEP 1)

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

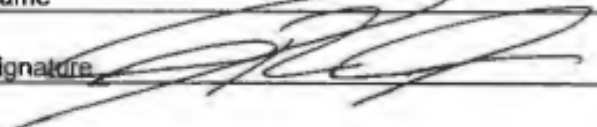
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Steven R. Ingle, Vice President - Engineering	
Signature 	Date 1/20/2017