



NORTH CAROLINA
Environmental Quality

JOSH STEIN

Governor

D. REID WILSON

Secretary

MICHAEL ABRACZINSKAS

Director

TBD

Mr. Douglas Julian
General Manager II
Duke Energy Carolinas, LLC
864 South Edgewood Road
Eden, NC 27288

SUBJECT: Air Quality Permit No. 08731T17
Facility ID: 7900156
Duke Energy Carolinas, LLC - Rockingham County Combustion Turbine Facility
Reidsville
Rockingham County
Fee Class: Title V
PSD Class: Major

Dear Mr. Julian:

In accordance with your completed Air Quality Permit Applications for renewal of a Title V permit and Title IV permit, we are forwarding herewith Air Quality Permit No. 08731T17, authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been 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 existing emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of



NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B

Rockingham County has triggered PSD Increment Tracking for NO_x, SO₂, PM₁₀, and PM_{2.5}. This permit renewal is not expected to consume or expand any increment for any tracked pollutant.

This Air Quality Permit shall be effective from TBD until TBD+5 years, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Russell Braswell at 919-637-6926 or russell.braswell@deq.nc.gov.

Sincerely yours,

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

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review)
Laserfiche (7900156)

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:

Daniel S. Hirschman, 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 Permit

The following changes were made to Air Permit No. 08731T16:*

Page No.	Section	Description of Changes
Throughout	Throughout	<ul style="list-style-type: none"> Updated dates and permit numbers. Updated formatting to match current DAQ standard. Changes to formatting are not intended to affect the Permittee's compliance requirements.
4	1	<ul style="list-style-type: none"> Noted that each turbine is controlled by water injection by adding CD-1 through CD-5 "water injection" to each turbine. This change is only for clarity, and does not represent a physical change to the facility.
5	2.1 A	<ul style="list-style-type: none"> Added 02Q .0400 and 02D .1425 to summary table.
6	2.1 A.2	<p><i>NSPS Subpart GG</i></p> <ul style="list-style-type: none"> Clarified fuel sulfur reporting requirements in Paragraph c. as requested by the Permittee. Removed repetitive CEMS requirements and monitor data availability requirement in Paragraph d.
7	2.1 A.3	<p><i>PSD</i></p> <ul style="list-style-type: none"> Changed CO CEMS RATA requirements in Paragraph i. as requested by the Permittee and approved by DAQ SSCB on November 13, 2024. Removed repetitive CEMS requirements in Paragraph i.
10	2.1 A.4 (new)	<p><i>02D .1425</i></p> <ul style="list-style-type: none"> Added this specific condition to incorporate 02D .1425 into the permit. This rule was promulgated in May 2022. This condition is state-enforceable only.
16	2.1 E	<ul style="list-style-type: none"> Removed references to the black-start generator being able to fire natural gas. This generator can only fire No. 2 fuel oil.
17	2.1 E.3	<p><i>NSPS Subpart IIII</i></p> <ul style="list-style-type: none"> Updated this condition to reflect regulatory updates.
19	2.1 E.6 (new)	<p><i>02D .0516</i></p> <ul style="list-style-type: none"> Added this condition because it applies to the emergency generator. Note that there are no specific monitoring, recordkeeping, or reporting requirements associated with this rule.
22	2.2 B.1	<p><i>MACT Subpart ZZZZ</i></p> <ul style="list-style-type: none"> Updated this condition to reflect regulatory updates.
27	2.4 (and throughout)	<p><i>CSAPR</i></p> <ul style="list-style-type: none"> Removed references to 40 CFR Part 97 Subpart BBBBBB because that rule has never applied to this facility. Removed "federally-enforceable only" header from this section.
n/a	2.5 (previous)	<p><i>Permit shield (former section)</i></p> <ul style="list-style-type: none"> Removed this section because it only included references to rules that have been repealed (e.g., Clean Air Interstate Plan)
28	3.	<ul style="list-style-type: none"> Created this section. Moved the list of insignificant activities to this section.
29	4. (new)	<ul style="list-style-type: none"> Created this section. Moved the General Conditions to this section. Updated General Conditions to version 8.0.

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
08731T17	08731T16	TBD	TBD+5 years

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than TBD + 5 years – 6 months.

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

Pursuant to Title 15A NCAC, Subchapter 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: **Duke Energy Carolinas, LLC -
Rockingham County Combustion Turbine Facility**

Facility ID: **7900156**
Primary SIC Code: **4911**
NAICS Code: **221112**

Facility Site Location: **240 Ernest Drive**
City, County, State, Zip: **Reidsville, Rockingham County, NC 27320**
Mailing Address: **864 South Edgewood Road**
City, State, Zip: **Eden, NC 27288**

Application Number: **7900156.24A and 7900156.24B**
Complete Application Date: **November 25, 2024 (both applications)**

**Division of Air Quality,
Regional Office Address:** **Winston-Salem Regional Office**
450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105

Permit issued this the TBD.

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

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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
CEMRI	Compliance and Emissions Data Reporting Interface
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)

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-CT-1 PSD BACT, NSPS GG	Natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbine (1,875 million Btu per hour maximum heat input rate while firing natural gas, 1,839 million Btu per hour maximum heat input rate while firing No. 2 fuel oil) equipped with dual-fuel dry low-NOx combustors	CD-1	Water injection for NOx control
ES-CT-2 PSD BACT, NSPS GG	Natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbine (1,875 million Btu per hour maximum heat input rate while firing natural gas, 1,839 million Btu per hour maximum heat input rate while firing No. 2 fuel oil) equipped with dual-fuel dry low-NOx combustors	CD-2	Water injection for NOx control
ES-CT-3 PSD BACT, NSPS GG	Natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbine (1,875 million Btu per hour maximum heat input rate while firing natural gas, 1,839 million Btu per hour maximum heat input rate while firing No. 2 fuel oil) equipped with dual-fuel dry low-NOx combustors	CD-3	Water injection for NOx control
ES-CT-4 PSD BACT, NSPS GG	Natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbine (1,875 million Btu per hour maximum heat input rate while firing natural gas, 1,839 million Btu per hour maximum heat input rate while firing No. 2 fuel oil) equipped with dual-fuel dry low-NOx combustors	CD-4	Water injection for NOx control
ES-CT-5 PSD BACT, NSPS GG	Natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbine (1,875 million Btu per hour maximum heat input rate while firing natural gas, 1,839 million Btu per hour maximum heat input rate while firing No. 2 fuel oil) equipped with dual-fuel dry low-NOx combustors	CD-5	Water injection for NOx control
ES-FT-1 PSD BACT	No. 2 fuel oil fixed-roof storage tank (1,700,000 gallon capacity) with atmospheric vents	N/A	N/A
ES-FT-2 PSD BACT	No. 2 fuel oil fixed-roof storage tank (1,700,000 gallon capacity) with atmospheric vents	N/A	N/A
ES-EG-1 PSD BACT, GACT ZZZZ	No. 2 fuel oil-fired stand-by emergency generator (300 kilowatts maximum rated power output)	N/A	N/A
ES-FP-1 PSD BACT, GACT ZZZZ	No. 2 fuel oil-fired emergency fire water pump (133 horsepower maximum rated power output)	N/A	N/A
ES-EGEN-BS NSPS III, GACT ZZZZ	One No. 2 fuel oil-fired black-start emergency generator (3,100 kilowatts/4,376 brake horsepower maximum rated generator/engine power output)	N/A	N/A

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) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring, recordkeeping, and reporting requirements specifically identified herein as applicable requirements:

A. Five natural gas/No. 2 fuel oil-fired simple-cycle internal combustion turbines (ID Nos. ES-CT-1 through ES-CT-5) each equipped with dual-fuel dry low-NOx combustors and water injection for NOx control (ID Nos. CD-1 through CD-5)

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Sulfur Dioxide and Nitrogen Oxides	See Section 2.1 A.2	15A NCAC 02D .0524 [40 CFR Part 60, Subpart GG]
Opacity, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide, Volatile Organic Compounds, PM10, and Sulfuric Acid Mist	See Section 2.1 A.3	15A NCAC 02D .0530
Nitrogen Oxides	Annual emission summary	15A NCAC 02D .1425
Odorous emissions	State-Enforceable Only See Section 2.2 A	15A NCAC 02D .1806
Sulfur Dioxide and Nitrogen Oxides	Acid Rain Permit requirements See Section 2.3	15A NCAC 02Q .0400
Nitrogen Oxides and Sulfur Dioxide	Cross State Air Pollution Rules See Section 2.4	40 CFR Part 97, Subparts AAAAA and CCCCC

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

- a. Visible emissions from these sources (ID Nos. ES-CT-1 through ES-CT-5) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. The following monitoring requirements shall apply:
 - i. No opacity monitoring for these sources (ID Nos. ES-CT-1 through ES-CT-5) is required while the source is burning natural gas.
 - ii. To ensure compliance, the Permittee shall perform a Method 9 test for 1 hour using a preapproved protocol to be submitted in accordance with General Condition JJ before the source operates more than 1,100 hours using No. 2 fuel oil. This monitoring protocol shall be repeated before each subsequent 1,100 hours of operation from the last test. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if this monitoring is not conducted.

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

- d. The Permittee shall keep a record of the number of hours each turbine operates while burning No. 2 fuel oil. The record shall indicate the number of operating hours on No. 2 oil that have occurred since the previous Method 9 test each turbine has operated while burning No. 2 fuel oil.
- e. The Permittee shall keep a record of each time a Method 9 test is performed on a turbine. The record shall include the date and result of the test.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 A.1.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. All instances of deviations from the requirements of this permit shall be clearly identified.
- g. The Permittee shall submit the results of the Method 9 test within 30 days of completion of the test or at the end of the calendar year quarter in which the Method 9 test is conducted, whichever occurs later.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart GG "Standards of Performance for Stationary Gas Turbines", including Subpart A "General Provisions."

NSPS Emissions Limitations [40 CFR 60.332 and 60.333]

- b. As required by NSPS Subpart GG, the following permit limits shall not be exceeded:

Affected Facility	Pollutant	Emission Limit
Combustion turbines (ID Nos. ES-CT-1 through ES-CT-5)	Nitrogen oxides	$STD = 0.0075 \times \left(\frac{14.4}{Y} \right) + F$
	Sulfur dioxide	0.015 by volume at 15% O ₂ on a dry basis -or- 0.8 percent sulfur in fuel, by weight

Where:

- STD = Allowable nitrogen oxides emissions in percent by volume at 15 percent O₂ on a dry basis.
- Y = Manufacturer's rated heat rate at manufacturer's rated load or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. Y shall not exceed 14.43 kJ/w-h.
- F = NO_x emission allowance for fuel bound nitrogen as defined in 40 CFR 60.332(a)(3).

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR 60.334(i)(3)]

- c. The Permittee shall comply with the fuel sulfur content monitoring required by 40 CFR 60.334(h) and (i)(1) and (2) to demonstrate compliance with the sulfur dioxide standard in 40 CFR 60.333. As an alternative, the Permittee may use the DAQ-approved custom fuel monitoring schedule per DAQ letter dated August 17, 2000. The core of that approved custom fuel monitoring schedule is provided below for convenience:
 - i. While burning natural gas in the combustion turbines the Permittee shall:
 - (A) Sample the natural gas supply to the combustion turbines twice per month for six months. If all of these analyses indicate compliance with 60.333 with low variability, then
 - (B) Sample the natural gas supply to the combustion turbines once per quarter for six quarters. If all of these analyses indicate compliance with 60.333 with low variability, then
 - (C) Sample the natural gas supply to the combustion turbines semiannually during the first and third quarters of each calendar year.
 - (D) If any analyses indicate noncompliance with 60.333 or a substantial change in fuel quality, then the Permittee must begin collecting natural gas samples weekly, notify DAQ of any exceedances, and

commence a reexamination of this custom fuel monitoring schedule. The weekly sampling shall continue until the fuel monitoring schedule reexamination is completed.

- (E) If the natural gas provider changes then the Permittee shall sample the natural gas supply to the combustion turbines daily for two weeks. If these analyses confirm compliance with 60.333 with low variability then the custom fuel monitoring schedule of (A) through (C), above, may be resumed.
- ii. While burning No. 2 fuel oil in the combustion turbines the Permittee shall:
 - (A) Sample the No. 2 fuel oil from each delivery truck before adding that fuel to the No. 2 fuel oil storage tanks or sample the No. 2 fuel oil in a No. 2 fuel oil storage tank once filled and before beginning to supply fuel to the combustion turbines; or
 - (B) Utilize vendor analyses to demonstrate compliance with 60.333. If this option is utilized then all of the No. 2 fuel oil delivered to the site must comply with the limits in 60.333.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the fuel sulfur content is not monitored.

- d. As an alternate to the continuous water-to-fuel injection rate monitoring and fuel monitoring requirements specified in 40 CFR 60.334(a) and (b), the Permittee shall demonstrate compliance with the nitrogen oxide emission limit in 40 CFR 60.332 for each combustion turbine using a nitrogen oxide continuous emissions monitoring system (CEMS) meeting the following requirements:
 - i. Each CEMS shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring quality of the system.
 - ii. Each CEMS must be capable of calculating nitrogen oxide emissions concentrations corrected to 15% O₂.
 - iii. The Permittee shall keep continuous records of the ambient temperature, ambient humidity and combustor inlet pressure so that the CEMS data can be corrected to International Organization for Standardization (ISO) standard ambient conditions anytime in the future to demonstrate compliance with the emission standard if requested by the Division of Air Quality.
 - vi. Recordkeeping requirements shall follow the requirements specified in 40 CFR 60.7.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the nitrogen oxide emission rate is not monitored.

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

- e. The Permittee shall submit the following reports postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.
 - i. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions for sulfur dioxide shall be reported for any daily period during which the sulfur content of the fuel being fired exceeds 0.8 percent by weight;
 - ii. Submit an excess emissions (calculated according to the requirements of 40 CFR 60.13(h)) and monitoring systems performance report and/or a summary report form and monitoring report for the nitrogen oxide CEMS. These reports shall include information required in 40 CFR 60.7(c) and (d) and shall contain a clearly calculated corresponding emission limitation as specified in 40 CFR 60.332; and
 - iii. Submit in writing the sulfur content of the No. 2 fuel oil fired in the combustion turbines and the number of hours of operation of each combustion turbine.

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

- a. The following Best Available Control Technology (BACT) limits shall not be exceeded:
 - i. Short-term maximum emission rates from each turbine shall not exceed:

Pollutant	BACT ^a				Control Methods
	Natural Gas		No. 2 Fuel Oil		
	lb/hr ^c	lb/MMBtu ^c	lb/hr ^c	lb/MMBtu ^c	
Opacity	d	d	d	d	Combustion control

Pollutant	BACT ^a				Control Methods
	Natural Gas		No. 2 Fuel Oil		
	lb/hr ^c	lb/MMBtu ^c	lb/hr ^c	lb/MMBtu ^c	
Nitrogen oxides	104 ^b	0.0575 ^b (15 ppmvd at 15% O ₂) ^b	294 ^b	0.171 ^b (42 ppmvd at 15% O ₂) ^b	Water injection and dry low-NOx combustors
Sulfur dioxide	2	0.001	82	0.0474	0.047% sulfur in fuel oil
Carbon monoxide	104 ^b	0.0575 ^b	213 ^b	0.124 ^b	Combustion control
Volatile Organic Compounds	6	0.0032	8	0.0047	Combustion control
Particulates/PM-10	6	0.0032	23	0.0135	Combustion control
Sulfuric acid	0.14	0.00008	---	---	0.047% sulfur in fuel oil

- a BACT shall apply at all times except as provided in Sections 2.1 A.3.a.i(A),(B) or (C) below.
- b Based on a 24-hour rolling average (unless otherwise noted) calculated using only actual operating hours (periods of zero emissions when not operating and periods measured in accordance with 2.1 A.3.a.i(A), (B) or (C) are not included).
- c ppmvd means "parts per million, volumetric dry basis", lb/hr means "pounds per hour", and lb/MMBtu means "pounds per million Btu"
- d The opacity limit in all cases is 20%

- (A) Emissions above the short-term BACT in Section 2.1 A.3.a.i are permitted during startup and shutdown when operating below 70% load and during periods of malfunction provided that optimal operational practices are adhered to and periods of excess emissions are minimized. During periods of startup or shutdown, emissions of nitrogen oxides shall not exceed 60 ppmvd at 15% O₂ (1-hour average) below 55% load and shall not exceed 42 ppmvd at 15% O₂ (1-hour average) between 55% and 70% load. During periods of malfunction, the NSPS requirements of Section 2.1 A.2.e.ii apply for excess emissions of nitrogen oxides.
- (B) Emissions of nitrogen oxides shall not exceed 17 ppmvd at 15% O₂ (24-hour rolling average) when firing natural gas during turbine tuning events. For tuning events resulting in NOx emissions exceeding 15 ppmvd at 15% O₂ (24-hour rolling average) when firing natural gas, no more than one turbine tuning event shall occur at a time and no more than seven tuning events (total for all five turbines) shall occur per consecutive rolling 12-month period with each event not to exceed a period of eight hours. Prior to turbine tuning, the Permittee shall notify the Winston-Salem Regional Office at least five days in advance. The notification shall include the details of the tuning activity and the proposed schedule. Any excess emissions (above those in Section 2.1 A.3.a.i) during tuning events shall be indicated in the next quarterly report and any deviations in the above tuning conditions shall be reported.
- (C) Emissions of nitrogen oxides when operating at an ambient temperature of less than or equal to 32°F and firing natural gas shall not exceed 25 ppmvd (173.3 lb/hr) at 15% O₂ on a 1-hour average basis for up to 500 full load equivalent hours per rolling consecutive 12-month period for each turbine, except as allowed in Section 2.1 A.3.a.i(A) above.

ii. Long term maximum emission rates from all turbines shall not exceed:

Pollutant	BACT ^a (tons per consecutive 12-month period)
Nitrogen oxides	1,255
Sulfur dioxide	215
Carbon monoxide	1,052.5
Volatile organic compounds	50
Particulates/PM-10	87.5

- a Emissions for the combustion turbines are for 1,000 hours per year operation on fuel oil and 2,000 hours per year on natural gas, at 100% load, and ISO standard ambient conditions.

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 A.3.a.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- c. The following operational restrictions shall apply:
 - i. The maximum hours of operation for each combustion turbine shall not exceed 3,000 full load equivalent hours per rolling consecutive 12-month period.
 - ii. When firing No. 2 fuel oil, the maximum hours of operation for each combustion turbine shall not exceed 1,000 full load equivalent hours per rolling consecutive 12-month period.
- d. Only natural gas shall be burned in the combustion turbines from April 1 through October 31 of each calendar year except during operational curtailment, recall of release capacity by firm transportation holders, "force majeure" events, and malfunctions. For purposes of this paragraph, "operational curtailment" shall mean when an interstate pipeline company or a local distribution company is unable to deliver, or restricts delivery of, gas to the Permittee; and "recall of release capacity" shall mean when holders of firm transportation rights (called capacity) that have allocated, released, or assigned, either permanently or temporarily, all or part of that capacity to others recall some or all of such capacity.
- e. In order to ensure that the sulfur dioxide ambient concentrations at the James River Face Wilderness Area are below the Class I Significant Impact Levels, the maximum No. 2 fuel oil sulfur content shall not exceed 0.025 percent by weight.

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

- f. The Permittee shall record and maintain records of:
 - i. the actual number of hours of operation when firing each fuel for each combustion turbine,
 - ii. the full load equivalent hours of operation when firing each fuel for each combustion turbine, and
 - iii. the amount of each fuel combusted in each turbine during each day.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records of actual number of hours of operation and/or fuel combusted for each combustion turbine are not maintained or exceed the limits in Sections 2.1 A.3.c and/or d, above.
- g. The Permittee shall monitor the sulfur content of the No. 2 fuel oil as specified in Section 2.1 A.2.c. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the No. 2 fuel oil sulfur content is not monitored, if the records of are not maintained, and/or if the sulfur content exceeds the limit in Section 2.1 A.3.e, above.
- h. The Permittee shall demonstrate compliance with the nitrogen oxide emission limits specified in Sections 2.1 A.3.a.i and ii by determining nitrogen oxide emissions as specified in Section 2.1 A.2.d. If nitrogen oxide emissions:
 - i. exceed the short-term BACT limits specified in Section 2.1 A.3.a.i for any 24-hour rolling average, except as allowed by ii, iii or iv below,
 - ii. exceed 60 ppmvd at 15% O₂ below 55% load or exceed 42 ppmvd at 15% O₂ between 55% and 70% load for any 1-hour average during periods of startup or shutdown,
 - iii. exceed 17 ppmvd at 15% O₂ for any 24-hour rolling average when firing natural gas during turbine tuning events,
 - iv. exceed 25 ppmvd (173.3 lb/hr) at 15% O₂ for any 1-hour average when operating at an ambient temperature of less than or equal to 32°F and firing natural gas, except as allowed by ii above, or
 - v. exceed the long-term BACT limit in Section 2.1 A.3.a.ii;or records of nitrogen oxide emissions are not maintained except as allowed by 2.1 A.2.d for periods of monitor downtime, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- i. The Permittee shall demonstrate compliance with the carbon monoxide emission limits specified in Section 2.1 A.3.a.i by using a continuous emissions monitoring system (CEMS) meeting the following requirements:
 - i. Each CEMS shall meet the applicable requirements of 15A NCAC 02D .0613 except that:
 - (A) A Cylinder Gas Audit (CGA) shall be conducted at least once each QA operating quarter on each simple-cycle stack CO CEMS and each combined-cycle stack CO CEMS in accordance with 40 CFR Part 75, Appendix B, §2.2.1 instead of once every calendar quarter. A QA operating quarter for each CO CEMS is defined as a calendar quarter in which the unit operates at least 168 unit operating hours (in simple-cycle or combined-cycle mode), and a unit operating hour is a clock hour during which a unit combusts any fuel,

- either for part of the hour or for the entire hour. Regardless of the number of hours of operation, at a minimum, a CGA shall be conducted at least once every four calendar quarters on each CO CEMS consistent with the requirements in 40 CFR Part 75, Appendix B, §2.2.3(f).
- (B) A Relative Accuracy Test Audit (RATA) shall be conducted once every four successive QA operating quarters (as defined above) in accordance with 40 CFR Part 75, Appendix B, §2.3.1.2 instead of once every four calendar quarters. Regardless of the number of hours of operation, at a minimum, a RATA shall be conducted at least once every eight calendar quarters on each CO CEMS consistent with the requirements in 40 CFR Part 75, Appendix B, §2.3.1.1(a). The frequency timeline for the RATAs shall begin with the first RATA.
 - (C) All grace period provisions from Part 75, Appendix B, §2.2.4 and, §2.3.3 apply.
 - (D) Daily calibration test shall be consistent with the requirements in 40 CFR Part 75, Appendix B and data validation rules contained in Part 75, Appendix B, Section 2.1.4 shall apply.
- ii. Recordkeeping requirements shall follow the requirements specified in 40 CFR 60.7.
- If any 24-hour rolling average carbon monoxide emission exceeds the limits specified in Section 2.1 A.3.a.i (except as allowed under Section 2.1 A.3.a.i.(A)) or records of carbon monoxide emissions are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- j. The Permittee shall submit the following reports 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.
 - i. Submit reports of any daily period during which the sulfur content of the No. 2 fuel oil being fired exceeds 0.025 percent by weight, as determined by the monitoring requirements in Section 2.1 A.2.c.
 - ii. Submit summary monitoring reports for the nitrogen oxide CEMS data for periods of excess emissions, using only actual operating hours, in units of the associated limits in Sections 2.1 A.3.a.i (i.e. lb/hr, lb/MMBtu, or ppmvd). Excess emissions to be reported are defined as follows:
 - (A) Any 24-hour rolling average exceeding the short-term limits specified in Section 2.1 A.3.a.i, except as allowed by (B), (C) or (D) below.
 - (B) For periods of startup and shutdown, any 1-hour average exceeding 60 ppmvd at 15% O₂ below 55% load or exceeding 42 ppmvd between 55% and 70% load. For periods of malfunction, excess nitrogen oxide emissions to be reported are defined by the NSPS requirements of Section 2.1.A.2.e.ii.
 - (C) When firing natural gas during turbine tuning events, any 24-hour rolling average exceeding 17 ppmvd at 15% O₂.
 - (D) When operating at an ambient temperature of less than or equal to 32°F and firing natural gas, any 1-hour average exceeding 25 ppmvd (173.3 lb/hr) at 15% O₂, except as allowed by (B) above.This report shall also contain the emission limitations as specified in Section 2.1 A.3.a.i.
 - iii. Submit summary monitoring reports showing all 24-hour rolling averages for the carbon monoxide CEMS data for periods of excess emissions (excluding periods of startup, shutdown and malfunction below 70% load; but including periods of startup, shutdown and malfunction at or above 70% load), using only actual operating hours, in units of the associated limits in Section 2.1 A.3.a.i (i.e. lb/hr and lb/MMBtu). This report shall also contain the emission limitations as specified in Section 2.1 A.3.a.i.
 - iv. Report the full load equivalent hours of operation per rolling consecutive 12-month period for each turbine when operating at an ambient temperature of less than or equal to 32°F and firing natural gas.
 - v. Report the total long-term annual nitrogen oxide emissions (tons per rolling consecutive 12-month period) from all turbines.

State-enforceable only

4. 15A NCAC 02D .1425: NOX SIP CALL BUDGET

The Permittee shall submit a report to the DAQ no later than January 30 of the calendar year after the NOx SIP Call control period (as defined in 15A NCAC 02D .1401(a)) listing the NOx emissions from the turbines (**ID Nos. ES-CT-1 through ES-CT-5**) during the NOx SIP Call control period. The NOx emissions in this report shall be determined in accordance with 40 CFR Part 75 for EGUs and large non-EGUs subject to 15A NCAC 02D .1418, and in accordance with 15A NCAC 02D .1424 for large non-EGUs using alternative monitoring.

B. Two No. 2 fuel oil fixed-roof storage tanks with atmospheric vents (ID Nos. ES-FT-1 and ES-FT-2)

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	See Section 2.1 B.1	15A NCAC 02D .0530
Odorous Emissions	State-Enforceable Only See Section 2.2 A	15A NCAC 02D .1806

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The following Best Available Control Technology (BACT) limit shall not be exceeded:
 - i. Long term maximum emission rates for both storage tanks, combined, shall not exceed:

Pollutant	BACT (tons per consecutive 12-month period)
Volatile Organic Compounds	0.65 total

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

- b. The maximum storage volume for No. 2 fuel oil shall not exceed 1.7 million gallons at any given time for each tank.
- c. The No. 2 fuel oil throughput for the two storage tanks, combined, shall not exceed 63,935,000 gallons per consecutive 12-month period.

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

- d. The Permittee shall maintain readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels. All records shall be kept for the life of the source.
- e. The Permittee shall keep records of the volume of each No. 2 fuel oil shipment (delivery) received and the volume of No. 2 fuel oil removed from each No. 2 fuel oil storage tank on a monthly basis (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the storage vessel dimension records are not maintained, or if the No. 2 fuel oil shipment (delivery) and removal records are not maintained, or if the throughput for the two No. 2 fuel oil storage tanks combined exceeds the limit included above in Section 2.1 B.1.b.

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

- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Sections 2.1 B.1.d and e above postmarked on or before January 30 of each calendar year for the preceding semiannual period between July and December and July 30 of each calendar year for the preceding semiannual period between January and June. The report shall identify all instances of deviations from the requirements of this permit and contain the following:
 - i. The total volume of No. 2 fuel oil shipments (delivery) received during each of the consecutive 12-month periods ending during the reporting period.
 - ii. The total volume of No. 2 fuel oil removed from each of the storage tanks during each of the consecutive 12-month periods ending during the reporting period.

C. One No. 2 fuel oil-fired stand-by emergency generator (ID No. ES-EG-1)

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

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide, Volatile Organic Compounds, Particulate Matter and PM ₁₀ , Sulfuric Acid Mist	See Section 2.1 C.3	15A NCAC 02D .0530
Odororous Emissions	State-Enforceable Only See Section 2.2 A	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.1	15A NCAC 02D .1111 [40 CFR Part 63, Subpart ZZZZ]

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

- a. Emissions of sulfur dioxide from this emission source (**ID No. ES-EG-1**) 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 C.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source (**ID No. ES-EG-1**).

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

- a. Visible emissions from this emission source (**ID No. ES-EG-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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 C.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from the firing of No. 2 fuel oil in this source (**ID No. ES-EG-1**).

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

- a. The following Best Available Control Technology (BACT) limit shall not be exceeded:
 - i. Long term maximum emission rates of emergency generator (**ID No. ES-EG-1**) shall not exceed:

Pollutant	BACT (tons per consecutive 12-month period)	Control Methods
Nitrogen oxides	2.6	No more than 500 hours of operation per consecutive 12-month period
Sulfur dioxide	0.03	
Carbon monoxide	0.56	
Volatile Organic Compounds	0.21	
Particulate Matter/PM-10	0.19	
Sulfuric acid	0.0026	

ii. Short-term maximum emission rates of emergency generator **ID No. ES-EG-1** shall not exceed:

Pollutant	BACT		Control Methods
	No. 2 Fuel Oil		
	lb/hr	lb/MMBtu	
Opacity	20%	---	Combustion control
Nitrogen oxides	10.4	3.7	
Sulfur dioxide	0.13	0.05	
Carbon monoxide	2.24	0.8	
Volatile Organic Compounds	0.84	0.3	
Particulates/PM-10	0.74	0.3	
Sulfuric acid	0.01	0.0038	

Notes: lb/MMBtu means "pounds per million Btu" and lb/hr means "pounds per hour"

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

- b. The emergency generator (**ID No. ES-EG-1**) shall operate no more than 500 hours per consecutive 12-month period. The Permittee shall be deemed in noncompliance if this operational restriction is exceeded.

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

- c. The Permittee shall record monthly and total annually the hours of operation of the emergency generator. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained or indicate an exceedance of the operating limit.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Section 2.1 C.3.c above postmarked on or before January 30 of each calendar year for the preceding semiannual period between July and December and July 30 of each calendar year for the preceding semiannual period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

D. One No. 2 fuel oil-fired emergency fire water pump (ID No. ES-FP-1)

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

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide, Volatile Organic Compounds, Particulate Matter and PM ₁₀ , Sulfuric Acid Mist	See Section 2.1 D.3	15A NCAC 02D .0530
Odorous Emissions	State-Enforceable Only See Section 2.2 A	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.1	15A NCAC 02D .1111 [40 CFR Part 63, Subpart ZZZZ]

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

- a. Emissions of sulfur dioxide from this emission source (**ID No. ES-FP-1**) is source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 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 .0516.

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

- c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this emission source (**ID No. ES-FP-1**).

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

- a. Visible emissions from this emission source (**ID No. ES-FP-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from the firing of No. 2 fuel oil in the emergency fire water pump (**ID No. ES-FP-1**).

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

- a. The following Best Available Control Technology (BACT) limit shall not be exceeded:
 - i. Long term maximum emission rates of emergency fire water pump (**ID No. ES-FP-1**) shall not exceed:

Pollutant	BACT (tons per consecutive 12-month period)	Control Methods
Nitrogen oxides	2.4	No more than 500 hours of operation per consecutive 12-month period
Sulfur dioxide	0.03	
Carbon monoxide	0.53	
Volatile Organic Compounds	0.2	
Particulate/PM-10	0.17	
Sulfuric acid	0.0024	

ii. Short-term maximum emission rates of emergency fire water pump (**ID No. ES-FP-1**) shall not exceed:

Pollutant	BACT		Control Methods
	No. 2 Fuel Oil		
	lb/hr	lb/MMBtu	
Opacity	20%	---	Combustion control
Nitrogen oxides	9.6	3.8	
Sulfur dioxide	0.12	0.05	
Carbon monoxide	2.1	0.8	
Volatile Organic Compounds	0.78	0.3	
Particulates/PM-10	0.68	0.3	
Sulfuric acid	0.01	0.0038	

Notes: lb/MMBtu means "pounds per million Btu" and lb/hr means "pounds per hour"

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

- b. This emission source (**ID No. ES-FP-1**) shall operate no more than 500 hours per consecutive 12-month period. The Permittee shall be deemed in noncompliance if this operational restriction is exceeded.

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

- c. The Permittee shall record monthly and total annually the hours of operation for this source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained or indicate an exceedance of the operating limit.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities required by Section 2.1 D.3.c above postmarked on or before January 30 of each calendar year for the preceding semiannual period between July and December and July 30 of each calendar year for the preceding semiannual period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

E. One No. 2 fuel oil-fired emergency black start generator (ID No. ES-EGEN-BS)

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

Pollutant	Limits/Standards	Applicable Regulation
Carbon Monoxide	Operation Restrictions	15A NCAC 02D .0501
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hydrocarbons, NO _x , PM, CO	See Section 2.1 E.3	15A NCAC 02D .0524 [40 CFR Part 60, Subpart IIII]
Hazardous Air Pollutants	See Section 2.1 E.4	15A NCAC 02D .1111 [40 CFR Part 63, Subpart ZZZZ]
Toxic Air Pollutants	Operation Restriction	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .1100)
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Odorous Emissions	State-Enforceable Only See Section 2.2 A	15A NCAC 02D .1806

1. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. In accordance with 15A NCAC 02D .0501(c), the Permittee modeled carbon monoxide emissions during “black-start” start-up conditions for the emergency generator (**ID No. ES-EGEN-BS**) and the combustion turbine (**ID No. ES-CT1**). As a result, the Permittee shall comply with the following restrictions:
 - i. Other than for maintenance checks and readiness testing, the Permittee shall only operate the emergency generator (**ID No. ES-EGEN-BS**) during “black start” start-up conditions in conjunction with any single combustion turbine (**ID No. ES-CT-1 through ES-CT-5**); and
 - ii. During periods of operation of the emergency generator (**ID No. ES-EGEN-BS**) for maintenance checks and readiness testing, the Permittee shall not operate at least one of the five combustion turbines (**ID No. ES-CT-1 through ES-CT-5**).

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

- b. The Permittee shall maintain records of the operational status of the combustion turbines (**ID Nos. ES-CT-1 through ES-CT-5**) during operation of the emergency generator (**ID No. ES-EGEN-BS**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501 if these records are not maintained.

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

- c. The Permittee shall submit a summary report of the recordkeeping activities required by Section 2.1 E.1.b above postmarked on or before January 30 of each calendar year for the preceding semiannual period between July and December and July 30 of each calendar year for the preceding semiannual period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

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

- a. Visible emissions from this emission source (**ID No. ES-EGEN-BS**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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 E.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from the firing of No. 2 fuel oil or natural gas in the emergency generator (**ID No. ES-EGEN-BS**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

Applicability [40 CFR 60.4200(a)(2)(i)]

- a. For this engine (**ID No. ES-EGEN-BS**), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart III "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" including Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 60.4219 shall apply.

General Provisions

- c. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 to 40 CFR 60 Subpart III. [40 CFR 60.4218]

Emission Standards [15A NCAC 02Q .0508(b)]

- d. The Permittee shall comply with the emission standards 40 CFR 60.4202 for all pollutants, for the same model year and maximum engine power for this engine. [40 CFR 60.4205(b)]

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

- e. The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 1090.305 including:
- i. a maximum sulfur content of 15 ppm; and
 - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
- [40 CFR 60.4207(b)]

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

- f. 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 E.3.d and e above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- g. The engine has the following monitoring requirements:
- i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
 - ii. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these monitoring requirements are not met.

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

- h. The Permittee shall:
- i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
 - ii. change only those emission-related settings that are permitted by the manufacturer; and
 - iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable. [40 CFR 60.4206 and 60.4211(a)]
- i. The Permittee shall comply with the emission standards in Section 2.1 E.3.d above by purchasing an engine certified to the emission standards in Section 2.1 E.3.d above for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]
- j. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) as defined in Section 2.1 E.3.b above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
- i. There is no time limit on the use of emergency stationary ICE in emergency situations.
 - ii. The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph j.ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency

situations as allowed by paragraph j.(iii) below counts as part of the 100 hours per calendar year allowed by this paragraph j.(ii).

(A) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph j.(ii) above. Except as provided in paragraph j.iii.(A) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

k. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the compliance requirements in Section 2.1 E.3.h through j are not met.

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

l. The following records shall be maintained:

- i. The results of inspection and maintenance made pursuant to Section 2.1 E.3.h above 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:
 - (A) the date and time of each recorded action;
 - (B) the results of each inspection;
 - (C) the results of any maintenance performed on the engine;
 - (D) any variance from manufacturer's recommendations, if any, and corrections made;
 - (E) the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR 60.4214(b)]; and
 - (F) if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)];
- ii. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 E.3.d above; and
- iii. records showing the fuel combusted meets the requirements in Section 2.1 E.3.e above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

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

m. The Permittee shall meet the following reporting requirements:

- i. The Permittee shall submit a summary report of monitoring and recordkeeping activities to the DAQ postmarked on or before January 30 of each calendar year for the preceding six-month period between July and

December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

- ii. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in Section 2.1 E.3.j.iii(A) above, the Permittee shall submit an annual report to the DAQ according to the requirements at 40 CFR 60.4214(d). [40 CFR 60.4214(d)]
- iii. The report in paragraph m.ii above shall also be submitted directly to the EPA electronically pursuant to 40 CFR 60.4214(d)(3). [40 CFR 60.4214(d)(3)]
 - (A) The Permittee may assert a claim of EPA system outage for failure to timely comply with this electronic reporting requirement if the requirements outlined in 40 CFR 60.4214(h) are met. [40 CFR 60.4214(h)]
 - (B) The Permittee may assert a claim of force majeure for failure to timely comply with this electronic reporting requirement if the requirements outlined 40 CFR 60.4214(i) are met. [40 CFR 60.4214(i)]The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the reporting requirements in paragraphs m.ii and iii above are not met.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(2)(iii)]

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

Stationary RICE subject to Regulations under 40 CFR Part 60 [15A NCAC 02Q. 0508(b)]

- b. Pursuant to 40 CFR 63.6590(c)(1), these sources shall meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A. If these requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

State-enforceable Only

5. 15A NCAC 02Q .0317: AVOIDANCE CONDITION

(Avoidance of 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS)

- a. In accordance with 15A NCAC 02Q .0317, the Permittee is avoiding the applicability of 15A NCAC 02D .1100 by not operating at least one of the five combustion turbines (**ID No. ES-CT-1 through ES-CT-5**) during periods of maintenance checks and readiness testing for the black-start emergency generator (**ID No. ES-EGEN-BS**).

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

- b. The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the operational status of all five combustion turbines (**ID No. ES-CT-1 through ES-CT-5**) during periods of maintenance checks and readiness testing of the emergency generator (**ID No. ES-EGEN-BS**).

Reporting [15A NCAC 02D .0605]

- c. The Permittee shall submit a summary report of the recordkeeping activities required by Section 2.1 E.5.b above postmarked or received on or before January 30 of each calendar year for the preceding semiannual period between July and December and July 30 of each calendar year for the preceding semiannual period between January and June.

6. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this emission source (**ID No. ES-EGEN-BS**) is source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 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 .0516.

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

- c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this emission source (**ID No. ES-EGEN-BS**).

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected sources

State-Enforceable Only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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

B. Two emergency-use engines:

- **One No. 2 fuel oil-fired stand-by emergency generator (ID No. ES-EG-1)**
- **One No. 2 fuel oil-fired emergency fire water pump (ID No. ES-FP-1)**

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability

- a. For these emission sources (**ID Nos. ES-EG-1 and ES-FP-1**; *existing emergency stationary compression ignition [CI] reciprocating internal combustion engines [RICE] located at an area source of HAP emissions*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions." [40 CFR 63.6585, 63.6590(a)(1)(iii)]

Definitions and Nomenclature

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

Applicability Date

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)]

Notifications

- d. The Permittee has no notification requirements. [40 CFR 63.6645(a)(5)]

General Provisions

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ. 40 CFR 63.6665]

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

- f. During periods of startup of the engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d to 40 CFR 60 Subpart ZZZZ and 63.6625(h)]
- g. Except during periods of startup of the engine, the Permittee shall:
- i. change oil and filter every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first;
 - ii. inspect air cleaner every 1,000 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first; and
 - iii. inspect all hoses and belts every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first, and replace as necessary
- [40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Section 2.2 B.1.g above. [40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Section 2.2 B.1.g above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ]
- j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]

- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
 - l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6 to 40 CFR 63 Subpart ZZZZ]
 - m. In order for the engine to be considered an emergency stationary RICE as defined in Section 2.2 B.1.b above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs m.i through m.iii below, is prohibited.
 - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - ii. The Permittee may operate emergency stationary RICE for any combination of the purposes specified in paragraph m.ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph iii below counts as part of the 100 hours per calendar year allowed by this paragraph m.ii.
 - (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph m.ii above. Except as provided in paragraph m.iii.(A) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (1) the engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - (2) the dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (3) the dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (4) the power is provided only to the facility itself or to support the local transmission and distribution system.
 - (5) the owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- [40 CFR 63.6640(f)(1), (2) and (4)]
- n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 B.1.f through m are not met.

Fuel Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.6604(b)]

- o. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in Section 2.2 B.1.m.iii.(A) above, the Permittee shall use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or

otherwise obtained) prior to January 1, 2015, may be used until depleted. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these requirements are not met.

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

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

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

- q. The Permittee shall keep the following:
- i. a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv)[40 CFR 63.6655(a)(1)];
 - ii. records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)];
 - iii. records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)];
 - iv. records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.2 B.1.k above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)(5)];
 - v. records of the maintenance conducted on the RICE pursuant to Section 2.2 B.1.l above [40 CFR 63.6655(d) and (e)];
 - vi. records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation [40 CFR 63.6655(f)];
 - vii. if the engine is used for the purposes specified in Section 2.2 B.1.m.iii(A) above, records of the notification of the situation, and the date, start time, and end time of engine operation for these purposes [40 CFR 63.6655(f)]; and
 - viii. each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), and (c)]

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

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

- r. The following reporting requirements apply:
- i. The Permittee shall submit to the DAQ a semiannual compliance report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b), (e), and 63.6650(b)(5)(f)]
 - ii. The compliance report in i above shall include:
 - (A) Company name and address.
 - (B) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (C) Date of report and beginning and ending dates of the reporting period.
 - (D) If you had a malfunction during the reporting period, the compliance report must include the starting and ending date and time, the duration (in hours), and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Section 2.2 B.1.k above (i.e., 40 CFR 63.6605(b)), including actions taken to correct a malfunction.
 - (E) If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period.
 - (F) If there were no periods during which the continuous monitoring system (CMS) (i.e., non-resettable hour meter), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

- (G) Engine site rating in brake HP, year construction of the engine commenced (as defined in 40 CFR 63.2, where the exact year is not known, provide the best estimate), and type of engine (CI, SI 2SLB, SI 4SLB, or SI 4SRB).
- (H) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [40 CFR 63.6650(c)(1) through (8)]
- iii. For each deviation from an emission or operating limitation that occurs for a stationary RICE where the Permittee is not using a CMS to comply with the emission or operating limitations in this subpart, the compliance report must also contain the following information:
 - (A) The total operating time (in hours) of the stationary RICE at which the deviation occurred during the reporting period.
 - (B) Information on the number, duration (in hours), and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
 - (C) A description of any changes in processes, or controls since the last reporting period. [40 CFR 63.6650(d)(1)]
- iv. For each deviation from an emission or operating limitation occurring for a stationary RICE where the Permittee is using a CMS to comply with the emission and operating limitations in this subpart, the compliance report must also contain the following information you must include information in in 40 CFR 63.6650(e)(1) through (e)(13). [40 CFR 63.6650(e)]
- v. The compliance report shall also include any reporting required under Section 2.2 B.1.i above, as necessary. [Table 2d to 40 CFR 63 Subpart ZZZZ]
- vi. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in Section 2.2 B.1.m.iii(A) above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the DAQ and electronically to the EPA. [40 CFR 63.6650(h) and (i)]
- vii. Beginning on February 26, 2025 for the annual report specified in paragraph v above and February 26, 2025 or one year after the report becomes available in CEDRI, whichever is later, for all other reports, the Permittee shall also submit the semiannual compliance report required in paragraph i above using the appropriate electronic report template on the CEDRI website ([https:// www.epa.gov/electronic-reporting-air-emissions/cedri](https://www.epa.gov/electronic-reporting-air-emissions/cedri)) for this subpart and following the procedure specified in 40 CFR 63.9(k), except any CBI must be submitted according to the procedures in 40 CFR 63.6645(h). The date report templates become available will be listed on the CEDRI website. The semiannual reports shall be submitted by the dates specified in i above. [40 CFR 63.6650(i)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements are not met.

2.3 Phase II Acid Rain Permit Requirements

ORIS code: 55116

Effective: Same dates as the Title V permit

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 Environmental Quality, Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q, and other applicable Laws.

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

CT1 (ES-CT-1) CT2 (ES-CT-2) CT3 (ES-CT-3) CT4 (ES-CT-4) CT5 (ES-CT-5)	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	SO ₂ allowances are not allocated by U.S. EPA for new units under 40 CFR Part 72.
	NO _x limit	Does not apply to gas or oil-fired units.

C. Comments, Notes and Justifications

None.

D. Phase II Permit Application (attached)

The Phase II Permit Application submitted for this facility, as approved by the Department of Environmental Quality, 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.

See Attachment: Acid Rain Permit Application, signed October 14, 2024

2.4 Cross State Air Pollution Rule (CSAPR) Permit Requirements

For the five combustion turbines (**ID Nos. ES-CT-1, 2, 3, 4, and 5**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program" and Subpart CCCCC "TR SO₂ Group 1 Trading Program".

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

Emission Source ID No.	Emission Source Description ^{1,2}
IS-1	Emergency generator diesel fuel storage tank (343 gallon capacity)
IS-2	Emergency fire pump diesel fuel storage tank (187 gallon capacity)
IS-3	Paved roads and parking lot
IS-4 (GACT, ZZZZ)	Propane-fired microwave communication tower backup emergency generator (5 kilowatt maximum rated power output)
IS-6	Cold degreaser/parts washer utilizing non-halogenated solvents
IS-11	Propane storage tank for IS-4 (120 gallons maximum capacity)
IS-12	Diesel storage tank for ES-EGEN-BS (5,000 gallons maximum capacity)

¹ Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) 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 8.0, 07/10/2024)

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 the 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, one copy 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. RESERVED

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 to Air Quality Permit No. 08731T17

Acid Rain Permit Application
signed October 14, 2024
(four pages)