

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

MICHAEL ABRACZINSKAS
Director



NORTH CAROLINA
Environmental Quality

TBD

Mohammed Alfayyumi
Director of Power Generation II
Dominion Energy
600 Canal Place
Richmond, Virginia 23219

SUBJECT: Air Quality Permit No. 06586T21
Facility ID: 4200170
Rosemary Power Station
Roanoke Rapids
Halifax County
Fee Class: Title V
PSD Class: Major

Dear Mr. Alfayyumi:

In accordance with your completed Air Quality Permit Application for renewal of a Title V and Title IV permit, we are forwarding herewith Air Quality Permit No. 06586T21 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



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

Mr. Mohammed Alfayyumi
TBD
Page 2

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

Halifax County has triggered Pollutant Increment Tracking for PM₁₀, SO₂, and NO_x. These Title V and Title IV permit renewals are not expected to consume or expand any increments for any tracked pollutants.

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 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

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

Enclosure

c: Michael Sparks, EPA Region 4 (Permit and Review)
Connie Horn (cover page only)
Raleigh Regional Office
Central Files

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

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

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

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

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

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

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

* * *

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

Summary of Changes to Permit

The following changes were made to the Rosemary Power Station Air Quality Permit No. 06586T20:*

Page No.	Section	Description of Changes
Throughout	Throughout	<ul style="list-style-type: none"> • Updated dates and permit numbers. • Updated permit format to current DAQ standard. Changes to formatting are not intended to affect the Permittee's compliance requirements.
13	2.2 A.2	<ul style="list-style-type: none"> • Moved the specific condition for NSPS Subpart GG to this section. This change is only for clarity and should not affect the Permittee's compliance requirements. • Combined NO_x and SO₂ limits for NSPS Subpart GG into one specific condition. This change is to match DAQ's format for this requirement in similar Title V permits, and will not affect compliance requirements. • Reduced frequency of reporting to semiannual because NSPS Subpart GG does not require quarterly reporting.
14	2.2 A.3	<ul style="list-style-type: none"> • Added specific condition for new CAM plan.
17	2.2 B.1.e	<ul style="list-style-type: none"> • Removed requirement to perform emission testing after the issuance of the T19 permit because that requirement has been completed.
n/a	2.2 C. (former)	<ul style="list-style-type: none"> • Removed this section because it was redundant to Section 2.2 A. The conditions in this section have been moved to Section 2.2 A (NSPS) or Section 2.4 (CSAPR).
20	2.4 (new)	<ul style="list-style-type: none"> • Moved the CSAPR requirements (formerly 2.2 C.3) to this section. This change is to match DAQ's format for this requirement in similar Title V permits, and will not affect compliance requirements. • Removed references to 40 CFR Part 97, Subpart BBBBBB from the permit because this rule no longer applies within North Carolina.
21	3.	<ul style="list-style-type: none"> • Created this section for insignificant activities. • This section is reserved for future use. There are no insignificant activities listed on the permit at this time.
21	4.	<ul style="list-style-type: none"> • Created this section. Moved General Conditions to this section. • Updated General Conditions to v6.0.

* 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
06586T21	06586T20	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 *[enter date six months prior to expiration date]*.

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

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

Permittee:

Rosemary Power Station

Facility ID:

4200170

Primary SIC Code:

4911

NAICS Code:

221112

Facility Site Location:

120 West 12th Street

City, County, State, Zip:

Roanoke Rapids, Halifax County, North Carolina 27870

Mailing Address:

600 Canal Place

City, State, Zip:

Richmond, Virginia 23219

Application Number(s)

4200170.21A & .21B

Complete Application Date(s):

September 20, 2021 (both applications)

Division of Air Quality,

Raleigh Regional Office

Regional Office Address:

3800 Barrett Drive

Raleigh, North Carolina 27609

Permit issued this the TBD.

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

Table of Contents

LIST OF ACRONYMS

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

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

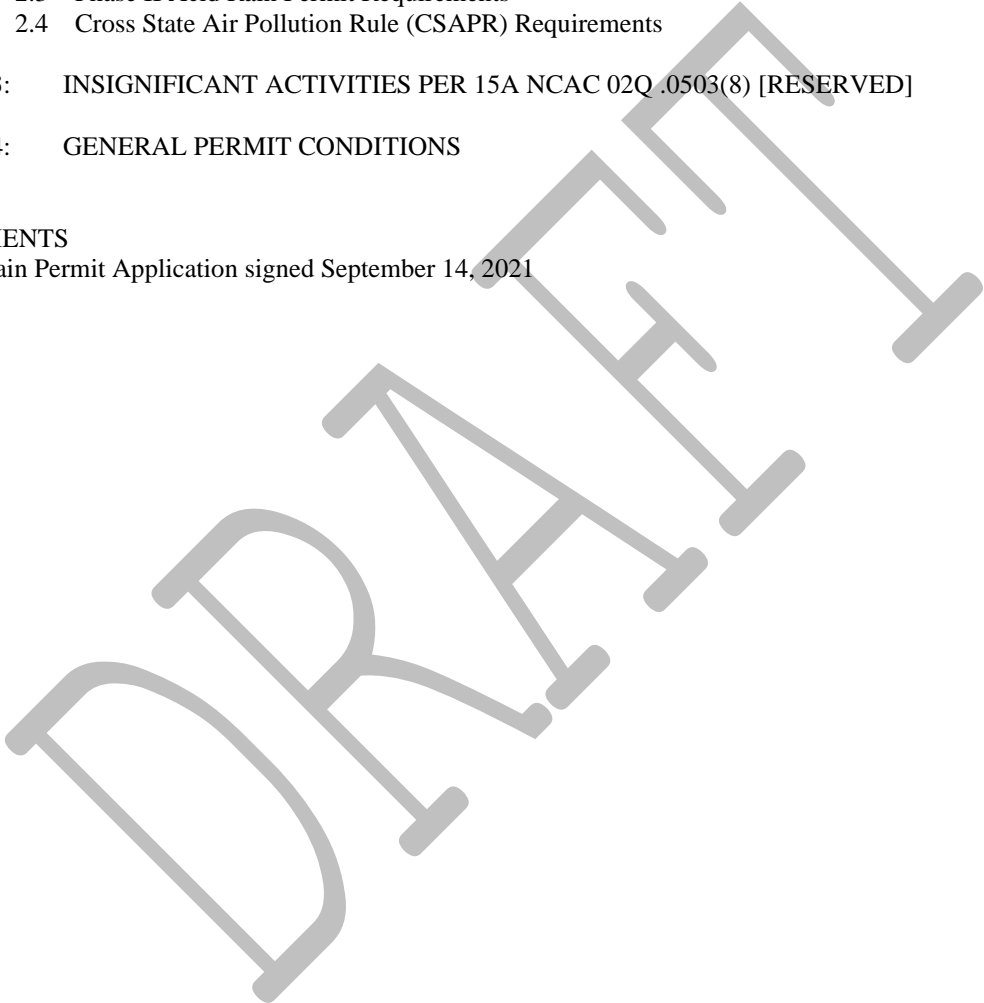
- 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 Multiple Emissions Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 Phase II Acid Rain Permit Requirements
- 2.4 Cross State Air Pollution Rule (CSAPR) Requirements

SECTION 3: INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8) [RESERVED]

SECTION 4: GENERAL PERMIT CONDITIONS

ATTACHMENTS

Acid Rain Permit Application signed September 14, 2021



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
CEDRI	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) AND APPURTENANCES

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

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5, 12-20	ES1-CT1 NSPS GG PSD	One General Electric, Frame 7 natural gas/No. 2 fuel oil-fired combined cycle combustion turbine (1,136 million Btu per hour heat input when firing natural gas and 1,095 million Btu per hour heat input when firing No. 2 fuel)	CD-3	water injection for nitrogen oxide control
6, 12-20	ES2-CT2 NSPS GG PSD	One General Electric, Frame 6 natural gas/No. 2 fuel oil-fired combined cycle combustion turbine (541 million Btu per hour heat input when firing natural gas and 525 million Btu per hour heat input when firing No. 2 fuel oil)	CD-5	water injection for nitrogen oxide control
7, 16-19	ES6-STR1 PSD	One No. 2 fuel oil storage tank (2,000,000 gallon capacity, equipped with a fixed roof and submerged fill pipes)	N/A	N/A
7, 16-19	ES-7 PSD	One cooling tower with drift eliminators	N/A	N/A
8-11, 19	ES-TEMP GACT JJJJJ	One natural gas/No. 2 oil-fired temporary/seasonal* boiler (maximum heat input not to exceed 33.5 million Btu per hour using gas and 31 million Btu per hour using oil)	N/A	N/A

* This boiler is considered "temporary" under 40 CFR Part 60, Subpart Dc, and is considered "seasonal" under 40 CFR Part 63, Subpart JJJJJ.

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. One natural gas/No. 2 fuel oil-fired combined cycle combustion turbine (ID No. ES1-CT1) equipped with water injection for nitrogen oxide control (ID No. CD-3)

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

Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 02D .0521
n/a	See Section 2.2 A.1; Heat input rate limits	15A NCAC 02D .0501(c)
Sulfur dioxide	See Section 2.2 B.1	15A NCAC 02D .0530 (g) (PSD BACT Limit)
	See Section 2.2 A.2 NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
	See Section 2.3; Acid Rain Requirements	15A NCAC 02Q .0400
	See Section 2.4 Cross State Air Pollution Rule	40 CFR Part 97, Subpart CCCCC
Nitrogen oxides	See Section 2.2 A.2 NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
	See Section 2.2 A.3 Comply with CAM plan monitoring	15A NCAC 02D .0614
	See Section 2.2 B.1	15A NCAC 02D .0530 (g) PSD BACT Limit
	See Section 2.3; Acid Rain Requirements	15A NCAC 02Q .0400
	See Section 2.4 Cross State Air Pollution Rule	40 CFR Part 97, Subpart AAAAA
Sulfuric Acid (H ₂ SO ₄), Carbon monoxide, Particulate matter, Volatile organic compounds	See Section 2.2 B.1	15A NCAC 02D .0530 (g) PSD BACT Limit

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

- a. Visible emissions from the combustion turbine (ID No. ES1-CT1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas or No. 2 fuel oil in this combustion turbine (ID No. ES1-CT1).

B. One natural gas/No. 2 fuel oil-fired combined cycle combustion turbine (ID No. ES2-CT2) equipped with water injection for nitrogen oxide control (ID No. CD-5)

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

Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 02D .0521
n/a	See Section 2.2 A.1; Heat input rate limits	15A NCAC 02D .0501(c)
Sulfur dioxide	See Section 2.2 B.1	15A NCAC 02D .0530 (g) PSD BACT Limit
	See Section 2.2 C NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
	See Section 2.3; Acid Rain Requirements	15A NCAC 02Q .0400
	See Section 2.4 Cross State Air Pollution Rule	40 CFR Part 97, Subpart CCCCC
Nitrogen oxides	See Section 2.2 A.2 NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
	See Section 2.2 A.3 Comply with CAM plan monitoring	15A NCAC 02D .0614
	See Section 2.2 B.1	15A NCAC 02D .0530 (g) PSD BACT Limit
	See Section 2.3; Acid Rain Requirements	15A NCAC 02Q .0400
	See Section 2.4 Cross State Air Pollution Rule	40 CFR Part 97, Subpart AAAAA
Sulfuric Acid (H ₂ SO ₄), Carbon monoxide, Particulate matter, Volatile organic compounds	See Section 2.2 B.1	15A NCAC 02D .0530 (g) PSD BACT Limit

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

- a. Visible emissions from the combustion turbine (ID No. ES2-CT2) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas or No. 2 fuel oil in this combustion turbine (ID No. ES2-CT2).

C. One cooling tower (ID No. ES-7) with drift eliminators

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.2 B.1 Drift guarantee of 0.005 percent	15A NCAC 02D .0530(g) PSD BACT Limit

D. One No. 2 fuel oil storage tank (ID No. ES6-STR1)

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 2.2 B.1 Fuel loading/storage: 1.1 tons per year	15A NCAC 02D .0530(g) PSD BACT Limit

E. One natural gas/No. 2-fired temporary/seasonal boiler (ID No. ES-TEMP)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.44 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
n/a	See Section 2.1 E.4 40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
n/a	Meet definition of “temporary” in NSPS Subpart Dc	15A NCAC 02Q .0317 NSPS Avoidance

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas and/or fuel oil that are discharged from this boiler (ID No. ES-TEMP) into the atmosphere shall not exceed 0.44 pounds per million Btu heat input.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas and/or fuel oil in this boiler (ID No. ES-TEMP).

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

- a. Emissions of sulfur dioxide from this boiler (ID No. ES-TEMP) 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 E.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in this boiler (ID No. ES-TEMP).

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

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

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the combustion of natural gas or No. 2 fuel oil in this boiler (ID No. ES-TEMP).

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

Applicability [40 CFR 63.11193, 63.11194(a)(1) and (c), and 63.11200(d)]

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

Definitions and Nomenclature [40 CFR 63.11237]

- b. i. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.
- ii. *Seasonal boiler* means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown.

General Provisions [40 CFR 63.11235]

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

Compliance Dates [40 CFR 63.11196(c), 63.11210(e)]

- d. The Permittee shall achieve compliance with the requirements of this Rule upon the startup of the boiler (**ID No. ES-TEMP**).

General Compliance Requirements [15A NCAC 02Q .0508(b), 40 CFR 63.11205(a)]

- e. At all times the Permittee shall operate and maintain the boiler (**ID No. ES-TEMP**), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

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

- f. The Permittee is required to conduct an initial performance tune-up no more than 61 months after the initial startup and subsequent tune-ups every five years. [40 CFR 63.11201(b), Table 2, and 63.11223(b), (d)]
- i. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up.
- ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
- iii. The tune-ups shall be conducted according to the following procedures:
- (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection;
- (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection;
- (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject;
- (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

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

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

- g. The Permittee shall:
- i. as required in 40 CFR 63.10(b)(2)(xiv), keep a copy of each notification and report that was submitted to comply with this rule.
 - ii. maintain on-site and submit, if requested by the Administrator, a report containing the following information:
 - (A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (B) A description of any corrective actions taken as a part of the tune-up of the boiler.
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11223(b)(6)]
 - iii. keep the following records to document conformance with the applicable requirements:
 - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - (B) Records of the days of operation per year for each seasonal boiler.
 - (C) Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
 - (D) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 2.1 E.4.e, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)]
 - iv. keep records in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d)]

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

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

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

**5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS**

- a. In order to avoid applicability of 15A NCAC 02D .0524 and 40 CFR Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," the Permittee shall ensure that this boiler (**ID No. ES-TEMP**) meets the definition of "temporary boiler" given in 40 CFR 60.41c:

"Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO₂ emissions rate no greater than 26 ng/J (0.060 lb/MMBtu [pounds per million Btu]), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition."

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

- b. The Permittee shall maintain records demonstrating that this boiler (**ID No. ES-TEMP**) meets the definition of “temporary boiler” in Section 2.1 E.5.a, above. The records shall, at a minimum, indicate the dates that a temporary boiler was brought on-site and removed. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- c. No reporting is required to demonstrate compliance with 15A NCAC 02Q .0317 for this boiler (**ID No. ES-TEMP**).

DRAFT

2.2 MULTIPLE EMISSION SOURCE(S) SPECIFIC LIMITATIONS AND CONDITIONS

A. Two combined cycle combustion turbines equipped with water injection for nitrogen oxide control (ID Nos. ES1-CT1 and ES2-CT2)

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

Pollutant	Limits/Standards	Applicable Regulation
n/a	See Section 2.2 A.1 Heat input rate limits	15A NCAC 02D .0501(c)
Sulfur dioxide	See Section 2.2 A.2 NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
Nitrogen oxides	See Section 2.2 A.2 NSPS Limits	15A NCAC 02D .0524 40 CFR Part 60, Subpart GG
	See Section 2.2 A.3 Comply with CAM plan monitoring	15A NCAC 02D .0614

1. 15A NCAC 02D. 0501(c): COMPLIANCE WITH NATIONAL AMBIENT AIR QUALITY STANDARDS

- a. Combustion turbine Frame 6 (ID No. ES2-CT2) shall not exceed 541 million Btu per hour heat input (24-hour block average, midnight to midnight) when firing natural gas and 525 million Btu per hour heat input (24-hour block average, midnight to midnight) when firing No. 2 fuel oil,
- b. Combustion turbine Frame 7 (ID No. ES1-CT1) shall not exceed 1,136 million Btu per hour heat input (24-hour block average, midnight to midnight) when firing natural gas and 1,095 million Btu per hour heat input (24-hour block average, midnight to midnight) when firing No. 2 fuel oil,

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

- c. No monitoring, recordkeeping, or reporting is required for heat input rates in these combustion turbines (ID Nos. ES1-CT1 and ES2-CT2).

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

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

Emission Limitations [40 CFR 60.332, 40 CFR 60.333]

- b. The Permittee shall comply with one of the following conditions:
 - i. Limit the sulfur content of any gases discharged into the air to 0.015 percent or less by volume at 15 percent oxygen by weight and on a dry basis, or
 - ii. Limit sulfur content in fuel burned to 0.8 percent or less by weight.
- c. The Permittee shall not cause any gases to be discharged into the atmosphere that contain nitrogen oxides in excess of the calculation found by the following equation, at 15 percent oxygen and on a dry basis.

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

- STD = allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis)
 Y = manufacture’s rated heat rate at manufacture’s rated load (kilojoules per watt hour) or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
 F = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332 (a)(4)

Testing [15A NCAC 02Q .0508(f), 40 CFR 60.60.335]

- d. If emissions testing is required, the testing shall be performed in accordance with 40 CFR 60.335 or an EPA approved alternative method, and General Condition JJ. If the results of this test are above the limits given in Sections 2.2 A.2.b and 2.2 A.2.c, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- e. The Permittee subpart shall monitor sulfur content of the fuel being fired in the turbine.
 - i. If the turbine is supplied fuel from a bulk storage tank, the sulfur content of the fuel shall be determined on each occasion that fuel is transferred to the storage tank from any other source. [40 CFR 60.334(i)(1)]
 - ii. Determine and monitor the sulfur content of natural gas at the turbine inlet on a quarterly basis. The Permittee is allowed to make necessary adjustments to the pipeline sulfur content determined by the supplier for additional odorant injected by Rosemary Power Station. [40 CFR 60.334(i)(3)]

If the sulfur content of the fuel being fired in the turbines is not monitored or the sulfur content exceeds the limit in Section 2.2 C.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- f. If a turbine is supplied its fuel from a bulk storage tank, the nitrogen content of the fuel shall be determined on each occasion that fuel is transferred to the storage tank from any other source. If the nitrogen content of the fuel is not monitored or the nitrogen content exceeds the value measured during the performance test required in 40 CFR 60.8 and used to determine the allowance, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.334(i)(1)]
- g. The Permittee shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the fuel consumption and water-to-fuel ratio are not monitored continuously. [40 CFR 60.334(a)]
- h. In accordance with 40 CFR 60.334(g), the Permittee shall develop and keep on-site a parameter monitoring plan, which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the parameter monitoring plan is not developed and kept on-site. [40 CFR 60.334(g)]
- i. For affected units that are also subject to 40 CFR Part 75 and that use the low mass emissions methodology in 40 CFR 75.19 or the NO_x emission measurement methodology in Appendix E to 40 CFR Part 75, the Permittee may meet the requirements of Sections 2.2 A.2.f through h, above, by developing and keeping on-site a quality-assurance plan, as described in 40 CFR 75.19 (e)(5) or in Section 2.3 of Appendix E and Section 1.3.6 of Appendix B to 40 CFR Part 75. If the Permittee does not comply with all applicable requirements of the monitoring methods in 40 CFR 75.19 or Appendix E to 40 CFR Part 75, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.334(g)]

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.334]

- j. The Permittee shall report excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - i. Excess emissions shall be any unit operating hour for which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water-to-fuel ratio needed to demonstrate compliance with Section 2.2 A.2.c above, as established during the performance test required in 40 CFR 60.8. Any unit operating hour in which no water is injected into the turbine shall also be considered an excess emission.
 - ii. A period of monitor downtime shall be any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water-to-fuel ratio are unavailable or invalid.
 - iii. Each excess emission report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, (if applicable) the nitrogen content of the fuel during each excess emission, and the graphs or figures developed under 40 CFR 60.335(a).
 - 1. The Permittee does not have to report ambient conditions if the Permittee opts to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if the Permittee is not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).
 - 2. The Permittee does not have to include the graphs and figures required by Part 75 if the current graphs and figures have been previously reported.
 - iv. If the Permittee elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are:

1. An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in 40 CFR 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.
 2. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
- k. The Permittee shall submit a summary report of the monitoring and recordkeeping requirements in Sections 2.2 A.2.e through i above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. For the turbines (**ID Nos. ES1-CT1 and ES2-CT2**), the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 02D .0614 to ensure that these turbines comply with 40 CFR Part 60, Subpart GG, 15A NCAC 02D .0524, and 15A NCAC 02D .0530.

Background

- b. **Emission Units:** two combined-cycle combustion turbines (**ID Nos. ES1-CT1 and ES2-CT2**), each equipped with water injection for NO_x control.
- c. Applicable Regulation, Emission Limit, and Monitoring Requirements
- i. Regulations: 15A NCAC 02D .0524 (40 CFR Part 60, Subpart GG), 15A NCAC 02D .0530 (BACT)
 - ii. Emission limits:
40 CFR Part 60, Subpart GG: The Permittee shall not cause any gases to be discharged into the atmosphere that contain nitrogen oxides in excess of the calculation found by the following equation, at 15 percent oxygen and on a dry basis.

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis)

Y = manufacture's rated heat rate at manufacture's rated load (kilojoules per watt hour) or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332 (a)(4)

BACT:

Turbine	Maximum emission rate while firing natural gas			Maximum emission rate while firing No. 2 fuel oil		
	(lb/hr)	(lb/MMBtu)	(ppmv)*	(lb/hr)	(lb/MMBtu)	(ppmv)*
ES1-CT1	173	0.16	42	277	0.26	65
ES2-CT2	83	0.16	42	134	0.26	65

* Dry basis, corrected to 15 percent O₂

- iii. Control Technology: Water injection

Monitoring Approach

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

Indicator No. 1	
I. Indicator	Fuel flow and water injection rate (i.e., water-to-fuel ratio)
Measuring approach	Continuous monitoring of the water-to-fuel ratio and load

	Indicator No. 1
II. Indicator Range	<p>An exceedance is defined as a water-to-fuel ratio outside the range established by the most recent emissions testing performed as required by 40 CFR Part 75. Exceedance triggers corrective action, recordkeeping, and reporting as required by NSPS Subpart GG and 40 CFR Part 75.</p> <p>When an exceedance occurs, the Permittee shall be deemed in noncompliance with the applicable emission limits specified in 2.2 A.3.c above.</p>
III. Performance Criteria	
Data Representativeness	Fuel flow and water injection rate shall be monitored in accordance with NSPS Subpart GG and 40 CFR Part 75.
QA/QC Practices and Criteria	Follow the QA/QC requirements of the site-specific monitoring plan in NSPS Subpart GG and 40 CFR Part 75.
Monitoring frequency	Indicator is monitored continuously.
Data Collection Procedures	Data is collected in accordance with NSPS Subpart GG and 40 CFR Part 75.
Averaging Period	Hourly (in accordance with NSPS Subpart GG definition of excess emissions)

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

- e. The permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The reports shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

B. Sources subject to PSD Limits:

- Two combined cycle combustion turbines (ID Nos. ES1-CT1 and ES2-CT2)
- No. 2 fuel oil storage tank (ID No. ES6-STR1) and
- Cooling tower (ID No. ES-7)

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

- a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded:
- i. For combustion sources:

Maximum Emission Rates for Frame 7 (ID No. ES1-CT1)*,**

Pollutant	Maximum emission rate while firing natural gas		Maximum emission rate while firing No. 2 fuel oil		Control technology
	(lb/hr)	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	
Nitrogen oxides ⁺ (NO _x)	173	0.16	277	0.26	H ₂ O injection
Sulfur dioxide (SO ₂)	1.23	1.086E-03	219	0.21	Low sulfur fuel
Sulfuric acid (H ₂ SO ₄)	Not applicable	Not applicable	23.0	0.022	Low sulfur fuel
Carbon monoxide (CO)	23.0	0.021	24.0	0.023	Combustion tech.
Particulate Matter (PM/PM ₁₀) [‡]	5.0	0.0064	10	0.013	Combustion tech.
Volatile organic compounds (VOC)	10.1	0.0098	10.1	0.010	Combustion tech.

* Emission limits based on high heating value content of fuel.

** Compliance averaging periods are as follows: PM, PM₁₀, SO₂, CO, and NO_x (3-hours); VOC, and H₂SO₄ (8-hours).

+ The concentration of nitrogen oxides in each turbine exhaust flue shall not exceed 42 ppmv for natural gas firing and 65 ppmv for No. 2 fuel oil firing, on a dry basis, corrected to 15 percent O₂.

‡ PM and PM₁₀ include both filterable and condensable particulate matter, per 40 CFR 51.166(b)(49)(i)(a).

Maximum Emission Rates for Frame 6 (ID No. ES2-CT2)*,**

Pollutant	Maximum emission rate while firing natural gas		Maximum emission rate while firing No. 2 fuel oil		Control technology
	(lb/hr)	(lb/MMBtu)	(lb/hr)	(lb/MMBtu)	
NO _x ⁺	83	0.16	134	0.26	H ₂ O injection
SO ₂	0.589	1.089E-03	105	0.21	Low sulfur fuel
H ₂ SO ₄	Not applicable	Not applicable	11.0	0.0220	Low sulfur fuel
CO	11.0	0.021	11.0	0.023	Combustion tech.
PM/PM ₁₀ [‡]	2.5	0.00672	10	0.028	Combustion tech.
VOC	5.0	0.0095	5.0	0.0099	Combustion tech.

* Emission limits based on high heating value content of fuel.

** Compliance averaging periods are as follows: PM, PM₁₀, SO₂, CO, and NO_x (3-hours); VOC, and H₂SO₄ (8-hours).

+ The concentration of nitrogen oxides in each turbine exhaust flue shall not exceed 42 ppmv for natural gas firing and 65 ppmv for No. 2 fuel oil firing, on a dry basis, corrected to 15 percent O₂.

‡ PM and PM₁₀ include both filterable and condensable particulate matter, per 40 CFR 51.166(b)(49)(i)(a).

- ii. For non-combustion sources:

Source	Pollutant	Maximum emission rate	Control technology
Fuel storage (ES6-STR1)	VOC	1.1 tons per year	Fixed roof and submerged fill pipe

Source	Pollutant	Maximum emission rate	Control technology
Cooling tower (ES-7)	PM	Drift guarantee of 0.005%	Drift eliminators

- c. Should the actual operation time for Frame 7 (**ID No. ES1-CT1**) exceed (or should the Permittee reasonably conclude that actual operating hours will exceed) 2,000 hours in any consecutive 12-month period, or should the actual combined operating hours for Frame 6 (**ID No. ES2-CT2**) and Frame 7 (**ID No. ES1-CT1**) exceed 4,000 in any consecutive 12-month period, the Permittee shall:
 - i. Re-evaluate “BACT” in accordance with 40 CFR 51.166, “Prevention of Significant Deterioration” for nitrogen oxides, particulates, PM₁₀ and carbon monoxide, and as soon as possible but no later than six months from the date the operation hours is exceeded, submit for the North Carolina Division of Air Quality review and approval a revised BACT analysis;
 - ii. Accept emissions limits based on the revised BACT analysis that achieve at a minimum the degree of emission reduction achieved by selective catalytic reduction control technology; and
 - iii. Meet such BACT limits as determined and accepted in Sections 2.2 B.1.c.i and ii, above, within a period not to exceed twelve months from receipt of a modified Air Permit which includes the revised BACT limits.

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

- d. If emissions testing is required, the testing shall be performed in accordance with an approved protocol and General Condition JJ. If the results of this test are above the limit given in Section 2.2 B.1.a above, applicable to the fuel being used during the test, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- e. When conducting emission testing in order to demonstrate compliance with 15A NCAC 02D .0530:
 - i. The Permittee shall test both turbines (**ID Nos. ES1-CT1 and ES2-CT2**).
 - ii. The test shall include the following pollutants, at a minimum, from each tested source:
 1. NOx,
 2. CO, and
 3. PM/PM10
 - iii. The Permittee shall sample for NOx and CO concurrently during each test run.
 - iv. When testing for PM/PM10, the Permittee shall use Methods 5 and 202, or another method as approved by DAQ.
- f. If the Permittee begins operating either turbine (**ID No. ES1-CT1 and ES2-CT2**) with a fuel other than the fuel that was used during the most recent performance test (test reference numbers 2017-375ST and 2018-202ST), the Permittee shall conduct a new performance test using the new fuel within 180 days of startup using the new fuel. The test shall meet the requirements of Section 2.2 B.1.d and e, above. If the Permittee does not conduct any required emission testing, or if the results of this test are above the limit given in Section 2.2 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- g. For the combustion turbines (**ID Nos. ES1-CT1 and ES2-CT2**), the Permittee shall ensure compliance with the nitrogen oxides emission limits in Section 2.2 B.1 above by installing and operating a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in the turbine in accordance with Section 2.2 A.2.g and/or i, above. If the fuel consumption and the ratio of water-to-fuel being fired in the turbines is not monitored and recorded continuously or there is an excess emission for nitrogen oxides for any unit operating hour as described in Section 2.2 A.2.j, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- h. For the combustion turbines (**ID Nos. ES1-CT1 and ES2-CT2**), the Permittee shall report excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - i. Excess emissions for nitrogen oxides shall be any unit operating hour which is considered a period of excess emissions per 40 CFR Part 60, Subpart GG (see Section 2.2 A.2.j, above). Any unit operating hour in which no water is injected into the turbine shall also be considered an excess emission.
 - ii. A period of monitor downtime shall be any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water-to-fuel ratio are unavailable or invalid.

- iii. Each excess emission report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, (if applicable) the nitrogen content of the fuel during each excess emission, and the graphs or figures developed during the most recent stack test required by Part 75.
 - (A) The Permittee does not have to report ambient conditions if the Permittee opts to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if the Permittee is not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).
 - (B) The Permittee does not have to include the graphs and figures required by Part 75 if the current graphs and figures have been previously reported.
- i. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

DRAFT

C. Facility-wide emission sources

State-Enforceable Only

1. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

- a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711(a) or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
- b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."
- c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
- d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde (75-07-0)				6.8
Acrolein (107-02-8)				0.02
Ammonia (7664-41-7)				0.68
Arsenic and inorganic arsenic compounds	0.053			
Benzene (71-43-2)	8.1			
Benzo(a)pyrene (50-32-8)	2.2			
Beryllium (7440-41-7)	0.28			
Cadmium (7440-43-9)	0.37			
Fluorides		0.34	0.064	
Formaldehyde (50-00-0)				0.04
n-hexane (110-54-3)			23	
manganese and compounds			0.63	
Mercury, vapor (7439-97-6)			0.013	
Methyl chloroform (71-56-6)			250	
Nickel metal (7440-02-0)			0.013	
Toluene (108-88-3)			98	14.4

Reporting [15A NCAC 02D .0611]

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

2.3 PHASE II ACID RAIN PERMIT REQUIREMENTS

ORIS code: 50555

Effective: Same as TV permit, TBD

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 .0400 and 02Q .0500, and other applicable Laws.

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

ID No. ES1-CT1 ID No. ES2-CT2	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 for gas or oil-fired units.

C. Permit Application (attached)

The permit applications 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 attached application.

2.4 CROSS STATE AIR POLLUTION RULE REQUIREMENTS

For the two combustion turbines (**ID Nos. ES1-CT1 and ES2-CT2**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAAA “TR NO_x Annual Trading Program” and Subpart CCCCC “TR SO₂ Group 1 Trading Program.”

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

[RESERVED]

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

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

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.
- C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.
- D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

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

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

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

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Title V Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.

3. Minor Permit Modifications [15A NCAC 02Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.

4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

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

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

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

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:

- i. the changes are not a modification under Title I of the Federal Clean Air Act;
- ii. the changes do not cause the allowable emissions under the permit to be exceeded;
- iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
- iv. the Permittee shall attach the notice to the relevant permit.

c. The written notification shall include:

- i. a description of the change;
- ii. the date on which the change will occur;
- iii. any change in emissions; and
- iv. any permit term or condition that is no longer applicable as a result of the change.

d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

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

1. "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

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

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

I.C. Other Requirements under 15A NCAC 02D .0535

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

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

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

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

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

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

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

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

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

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

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

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

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

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

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

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

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

facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

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

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

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

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

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

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

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

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

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

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

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

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

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

- c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

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

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

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

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

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

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

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

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

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

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

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

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

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

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

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

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

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

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

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

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

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

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

- iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

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

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

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

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

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

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

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

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

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.

- a. The written notification shall include:
 - i. a description of the change at the facility;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

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

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

DRAFT

ATTACHMENT

Acid Rain Permit Application
(five pages)

DRAFT