ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

Month XX, 2022

Steven Allen
Field Operations Manager
NC Municipal Power Agency No. 1 - Gastonia Prime Power Park
P.O. Box 2819
Huntersville, NC 28070 2819

SUBJECT: Air Quality Permit No. 09878T05
Facility ID: 3600338
NC Municipal Power Agency No. 1 - Gastonia Prime Power Park
Dallas, Gaston County, North Carolina
Fee Class: Title V
PSD Class: Minor

Dear Mr. Allen:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received April 25, 2019, we are forwarding herewith Air Quality Permit No. 09878T05 to NC Municipal Power Agency No. 1 - Gastonia Prime Power Park, Dallas, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

Pursuant to 15A NCAC 02Q .0203(e), the Permittee shall be assessed annually, in addition to any otherwise applicable fee, a non-attainment RACT fee.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval

from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Gaston County has triggered increment tracking under PSD for particulate matter 10 (PM_{10}), sulfur dioxide (SO_2), and nitrogen oxide (NO_X). However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from Month XX, 2022 until Month XX, 202X, 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 Davis Murphy at 336-776-9644 or davis.murphy@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)
Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

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

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

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

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

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

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

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

* * *

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

Summary of Changes to Permit

The following changes were made to the NC Municipal Power Agency No. 1 - Gastonia Prime Power Park Air Permit No. 09878T05:

Page No.	Section	Description of Changes
--	Cover page and Throughout	• Updated all dates and permit revision/application numbers. • Added Notice Regarding the Right to Contest a Division of Air Quality Permit Decision • Updated Summary of Changes to Permit
--	Throughout	• Updated 15A NCAC 2D to 15A NCAC 02D • Updated 15A NCAC 2Q to 15A NCAC 02Q • Revised to reflect current shell language
1	First Page of Permit	Added a notation to alert Permittee to the due date for submitting a permit application for the renewal of the permit.
2	Table of Contents	Added Section 2.3 for Insignificant Activities per 15A NCAC 02Q .0503(8) and Section 2.4 for Cross State Air Pollution (CSAPR) Permit Requirements
3	List of Acronyms	Moved list of acronyms from back of the permit to Page 3.
4	1 – Emission Source and Control Device Table	Removed footnote for minor modification of control devices CD-6A through CD-9A and CD-6B through CD-9B.
5	2.1 A.1	Added condition for 15A NCAC 02D .0516
5-10	2.1 A.2 though A.9	Revised standard language to be consistent with current shell standards. No changes in intent were made.
8	2.1 A.6	Update condition title to reflect rule
9-10	2.1 A.8 and A.9	Revise equations for consistency with units.
11	2.1 B.1	Added condition for 15A NCAC 02D .0516
11	2.1 B.2	Revised standard language to be consistent with current shell standards. No changes in intent were made.
12-14	2.1 B.3	• Revised standard language to be consistent with current shell standards. • Removed provisions allowing for emergency demand response operation or operation during periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. • Added conditions to allow operation for up to 50 hours per year for non-emergency situations where power is supplied as part of a financial arrangement with another entity.
15	2.1 C	• Removed 02D .2400 from table. • Added 40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC to table
15	2.1 C.1	Revised standard language to be consistent with current shell standards. No changes in intent were made.
16	2.1 C.2.c	Reformatted condition
18	2.1 C.2.i.ii.(B)	Corrected cross reference
19	2.1 C.4	Update condition title to reflect rule and reformatted conditoin to more accurately reflect rule requirements
--	2.1 C.5	Removed 02D .2400 Condition
21-25	2.2 A.1 through A.5	Revised standard language to be consistent with current shell standards. No changes in intent were made.
26	2.3	Added Insignificant Activities list section
26	2.4	Added Cross State Air Pollution Rule (CSAPR) Condition.
27-35	3	Updated General Conditions (v6.0, 01/07/2022)

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

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
09878T05	09878T04	Month XX, 2022	Month XX, 202X

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: **NC Municipal Power Agency No. 1 - Gastonia Prime Power Park**

Facility ID: **3600338**
Primary SIC Code: **4911**
NAICS Code: **221119**

Facility Site Location: **1109 Gastonia Technology Parkway**
City, County, State, Zip: **Dallas, Gaston County, North Carolina 28034**
Mailing Address: **P.O. Box 2819**
City, State, Zip: **Huntersville, NC 28070 2819**

Application Number: **3600338.19A**
Complete Application Date: **April 25, 2019**

Division of Air Quality, Regional Office Address: **Mooresville Regional Office**
610 East Center Avenue, Suite 301
Mooresville, North Carolina 28115

Permit issued this the XX day of XXXXX, 2022

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

Table of Contents

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
PM_{10}	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
SO_2	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	ES-1 ES-2 **NSPS IIII** **MACT ZZZZ** **RACT**	two diesel fired peak shaving generators (each 2,250 kW output, each 3,286 brake horsepower engine output)	NA	NA
11, 21	ES-6 through ES-9 **MACT ZZZZ**	four diesel fired emergency generators (each 1,825 kW output, each 2,447 brake horsepower engine output) with electronic fuel injection control and additional cooling to lower the temperature of the after cooler	CD-6A[1] through CD-9A[1] CD-6B[1] through CD-9B[1]	Catalytic oxidizer (each consists of 3.8 cubic feet of catalyst) Selective catalytic reduction System (each consists of 38 cubic feet of catalyst)
15, 21, 26	ES-10a through ES-13a **NSPS KKKK** **RACT** OR ES-10b through ES-13b **NSPS KKKK** **RACT** OR ES-10c through ES-18c **NSPS KKKK** **RACT** OR ES-10d through ES-18d **NSPS KKKK** **RACT**	four simple cycle combustion turbines (55 MW output each, 188 million Btu per hour heat input rate each when fired with natural gas or No. 2 fuel oil) OR four simple cycle combustion turbines (61 MW output each, 208 million Btu per hour heat input rate each when fired with natural gas or No. 2 fuel oil) OR nine simple cycle combustion turbines (25 MW output each, 85 million Btu per hour heat input rate each when fired with natural gas or No. 2 fuel oil) OR nine simple cycle combustion turbines (25 MW output each, 79 million Btu per hour heat input rate each when fired with natural gas or No. 2 fuel oil)	NA	NA

[1] Each of these control devices is voluntary and can operate on an as needed basis for controlling emissions of CO and NO_X.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Two diesel-fired peak shaving generators (ID Nos. ES-1 and ES-2)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity, except during start-up, shutdown and malfunction	15A NCAC 02D .0521
Hydrocarbons, nitrogen oxides, carbon monocide, and partiulate matter	See Section 2.1 A.3	15A NCAC 02D .0524 [40 CFR Part 60 Subpart IIII]
Hazardous air pollutants	See Section 2.1 A.4	15A NCAC 02D .1111 [40 CFR Part 63 Subpart ZZZZ]
Nitrogen oxides	See Section 2.1 A.5	15A NCAC 02D .1402(d)
Nitrogen oxides	See Section 2.1 A.6	15A NCAC 02D .1418
Nitrogen oxides	See Section 2.1 A.7	15A NCAC 02D .1423
Carbon monoxide	Less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen oxides	Less than 100 tons per consecutive 12-month period	15A NCAC 02Q .0317 NAA NSR Avoidance

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

a. Emissions of sulfur dioxide from the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

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

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources **(ID Nos. ES-1 and ES-2).**

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

a. Visible emissions from the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

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

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuels in the peak shaving generators **(ID Nos. ES-1 and ES-2).**

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

Applicability

a. For the peak shaving generators **(ID Nos. ES-1 and ES-2),** the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

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

b. Pursuant to 40 CFR 60.4218, The Permittee shall comply with the General Provisions of 40 CFR Part 60 Subpart A as presented in Table 8 of 40 CFR Part 60, Subpart IIII.

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

c. The Permittee shall comply with the following emission standards for each peak shaving generator:

HC: 1.3 g/kW-hr (1.0 g/hp-hr)
NO_X: 9.2 g/kW-hr (6.9 g/hp-hr)
CO: 11.4 g/kW-hr (8.5 g/hp-hr)
PM: 0.54 g/kW-hr (0.4 g/hp-hr)

[40 CFR 60.4204(b) and 60.4201(b), and Table 1 to the Subpart]

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

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

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

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.3.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

f. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

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

g. The Permittee shall:
   i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR Parts 89, 94 and/or 1068 as applicable.
   [40 CFR 60.4206 and 60.4211(a)]

h. The Permittee shall comply with the emission standards in Section 2.1 A.3.c above, by purchasing an engine certified to the emission standards in Section 2.1 A.3.c. The engine shall be installed and configured according to the

manufacturer's emission-related specifications. [40CFR 60.4211(c)]

i. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the requirements given in Section 2.1 A.3.f through h above, are not met.

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

j. To ensure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the engine;
   iv. any variance from manufacturer's recommendations, if any, and corrections made;
   v. if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR60.4214(c)]; and
   vi. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 A.3.c.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

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

k. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.3.f through A.3.j above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

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

Applicability

a. For the peak shaving generators **(ID Nos. ES-1 and ES-2)**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

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

b. Pursuant to 40 CFR 63.6590(c)(1), the peak shaving generators **(ID Nos. ES-1 and ES-2)** must meet the requirements of 40 CFR Part 63, Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for these engines under 40 CFR Part 63, Subpart ZZZZ and Subpart A. If these requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

5. 15A NCAC 02D .1402(d): REASONABLY AVAILABLE CONTROL TECHNOLOGY FOR NITROGEN OXIDES

a. For the peak shaving generators **(ID Nos. ES-1 and ES-2)**, the Permittee shall comply with the RACT requirements for NO_X emissions upon start-up. NO_X emissions (except during start-up, shut-down and malfunction, not to exceed 36 consecutive hours, and except during the regularly scheduled maintenance activities) shall not exceed 222 ppm at 15% O_2 dry basis or 14,259 pounds per month, both averaged on a rolling 30-day period.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1402(d).

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

c. The Permittee shall use the following approved procedure to calculate NO_X emissions on a daily basis and to document that the 30-day rolling average did not exceed the emission standard specified in Section 2.1 A.5.a above. The Permittee shall monitor the hours of operation and average daily load for each peak shaving generator, and use

the NO_X emission rates in the table below, corresponding to the engine load or the emission rate corresponding to 100% engine load.

Load Percent	NO_X Emission Rate (lb/hr)
100	65.9
75	45.4
50	26.9
25	13.3
10	9.1

NO_X emissions calculations (daily and 30-day rolling average) shall be recorded in an emissions log. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of these records. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1402(d) if the above records are not kept or the records are not made available to officials of the Division of Air Quality, upon request, or the emissions of NO_X for any month exceed the limit in Section 2.1 A.5.a above.

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

d. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Section 2.1.A.5.c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The daily nitrogen oxide emissions for each day the engines operated during the period.
   ii. The 30-day rolling average for NO_X emissions for each day of the reporting period.

   All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02D .1418: NEW ELECRIC GENERATING UNITS, BOILERS, COMBUSTION TURBINES, AND I/C ENGINES

a. For peak shaving generators **(ID Nos. ES-1 and ES-2)**, the Permittee shall comply with all applicable provisions for emission limitations, compliance, monitoring, recordkeeping, and reporting, included in 15A NCAC 02D .1423 "Large Internal Combustion Engines", and no further requirements shall apply to these peak shaving generators under 15A NCAC 02D .1418. If the Permittee does not comply with the requirements in 15A NCAC 02D .1423, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1418.

7. 15A NCAC 02D .1423: LARGE INTERNAL COMBUSTION ENGINES

a. The peak shaving generators **(ID Nos. ES-1 and ES-2)** shall comply with the adjusted NO_X emission limitation of 222 ppm (except during start-up, shut-down and malfunction, not to exceed 36 consecutive hours, and except during the regularly scheduled maintenance activities), corrected to 15 percent stack gas oxygen on a dry basis, or 14,259 pounds per month, both averaged over a rolling 30-day period. [15A NCAC 02D .1423(b) and (c)]

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.7.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1423.

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

c. The monitoring/recordkeeping requirements in Section 2.1 A.5.c, above, shall be sufficient to demonstrate compliance with the requirements in 15A NCAC 02D .1423. If the Permittee does not comply with the requirements in Section 2.1 A.5.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1423.
d. The Permittee shall maintain all records necessary to demonstrate compliance with the requirements in 15A NCAC 02D .1423 for two calendar years at the facility at which the engine is located. The records shall be made available to the Director upon request. The Permittee shall maintain records of the following information for each day the engine operates:

i. identification and location of the engine;
ii. calendar date of record;
iii. the number of hours the engine operated during each day, including startups, shutdowns, and malfunctions, and the type and duration of maintenance and repairs;
iv. date and results of each emissions inspection;
v. a summary of any emissions corrective maintenance taken; and
vi. the results of all compliance tests;

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1423 if these records are not maintained, or the records are not maintained for two calendar years at the facility at which the engine is located, or the records are not made available to the Director upon request.

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

e. The Permittee shall submit a report documenting the engine's total NO_X emissions beginning May 1 and ending September 30 of each year by October 31 of each year, beginning with the year of first ozone season that the engine operates.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.7.c through d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

8. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall discharge into the atmosphere less than 250 tons of carbon monoxide total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.8.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall keep monthly records of the hours of operation of each peak shaving generator in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

d. The hours of operation of the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall be limited such that carbon moxoxide emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$\begin{matrix}\text{CO emissions for} \\ \text{peak saving generators} \\ \text{(ton/12 months)}\end{matrix} = \sum_{i=1}^{12}\left[0.0187\ \left(\frac{\text{lb}}{\text{hp-hr}}\right) \times e_1 \left(\frac{\text{hp-hr}}{\text{month}}\right)\right] / 2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_1 = energy usage in hp-hr per month for each peak shaving generator
i = month, i

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept or if the carbon monoxide emissions exceed the limit in Section 2.1 A.8.a above.

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

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.8.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly carbon monoxide emissions for the previous 17 months. The emissions must be calculated for

each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

9. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0531: SOURCES IN NONATTAINMENT AREAS

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall discharge into the atmosphere less than 100 tons of NO_X total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.9.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall keep monthly records of the hours of operation of each peak shaving generator in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

d. The hours of operation of the peak shaving generators **(ID Nos. ES-1 and ES-2)** shall be limited such that NO_X emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$\begin{matrix}\text{NO}_X \text{ emissions from} \\ \text{peak saving generators} \\ \text{(ton/12 months)}\end{matrix} = \sum_{i=1}^{12}\left[0.0152\ \left(\frac{\text{lb}}{\text{hp-hr}}\right)\times e_1\left(\frac{\text{hp-hr}}{\text{month}}\right)\right]/2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_1 = energy usage in hp-hr per month for each peak shaving generator
i = month, i

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept or if the NO_X emissions exceed the limit in Section 2.1 A.9.a above.

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

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.9.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly NO_X emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

B. Four diesel fired emergency generators (ID Nos. ES-6 through ES-9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity, except during start-up, shutdown and malfunction	15A NCAC 02D .0521
Hazardous Air Pollutants	See Section 2.1 A.3.	15A NCAC 02D .1111 [40 CFR Part 63 Subpart ZZZZ]
Carbon Monoxide	Less than 250 tons per consecutive 12-month period - See Section 2.2 A.1.	15A NCAC 02Q .0317 PSD Avoidance
Sulfur Dioxide	Less than 250 tons per consecutive 12-month period - See Section 2.2 A.2.	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides (as NO_2)	Less than 250 tons per consecutive 12-month period - See Section 2.2 A.3.	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides	Less than 100 tons per consecutive 12-month period - See Section 2.2 A.4.	15A NCAC 02Q .0317 NAA NSR Avoidance
Volatile Organic compounds	Less than 100 tons per consecutive 12-month period - See Section 2.2 A.5	15A NCAC 02Q .0317 NAA NSR Avoidance

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

a. Emissions of sulfur dioxide from the peak shaving generators **(ID Nos. ES-6 through ES-9)** 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 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources **(ID Nos. ES-6 through ES-9).**

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

a. Visible emissions from the emergency generators **(ID Nos. ES-6 through ES-9)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

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

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuels in the emergency generators **(ID Nos. ES-6 through ES-9)**.

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

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

a. For the emergency generators **(ID Nos. ES-6 through ES-9)**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Definitions and Nomenclature

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

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

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

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

d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

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

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

f. During periods of startup of each emergency generator **(ID Nos. ES-6 through ES-9)**, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d of 40 CFR Part 63, Subpart ZZZZ and 40 CFR 63.6625(h)]

g. Except during periods of startup of each emergency generator **(ID Nos. ES-6 through ES-9)**, the Permittee shall:
   i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
   ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
   iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary

   [40 CFR 63.6603(a), Table 2d]

h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Section 2.1 B.3.g, above. [40 CFR 63.6603(a), Table 2d of 40 CFR Part 63, Subpart ZZZZ, 40 CFR 63.6625(i)]

i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Section 2.1 B.3.g, above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d of 40 CFR Part 63, Subpart ZZZZ]

j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]

k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require 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

which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 40 CFR 63.6640(a), Table 6 of 40 CFR Part 63, Subpart ZZZZ]

m. In order for the engine to be considered an emergency stationary RICE as defined in Section 2.1 B.3.b above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs i through iii below, is prohibited. [40 CFR 63.6640(f)(1), (2) and (4)]
   i. There is no time limit on the use of emergency stationary RICE in emergency situations.
   ii. The Permittee may operate emergency stationary RICE for any combination of the purposes specified in paragraph (A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph iii below counts as part of the 100 hours per calendar year allowed by this paragraph ii.
      (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
   iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph ii, above. Except as provided in paragraph (A) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
      (A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
         (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
         (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
         (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
         (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
         (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements in Section 2.1 B.3.e through B.3.m above, are not met.

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

o. If the emergency generators **(ID Nos. ES-6 through ES-9)** are operated for the purpose specified in Section 2.1 B.3.m.iii.(A) above, the Permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these fuel requirements are not met.

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

p. Each engine **(ID Nos. ES-6 through ES-9)** shall be equipped with a non-resettable hour meter. [40 CFR 63.6625(f)]

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

q. The Permittee shall keep the following:
   i. A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted according to the requirement in 40 CFR 63.10(b)(2)(xiv)[40 CFR 63.6655(a)(1)];
   ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)];
   iii. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)];
   iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 B.3.k, above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)(5)];
   v. Records of the maintenance conducted on the RICE pursuant to Section 2.1 B.3.l above [40 CFR 63.6655(d) and (e)];
   vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. [40 CFR 63.6655(f)]
      (A) The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
      (B) If` the engine is used for the purposes specified in Section 2.1 B.3.m.iii.(A) above, records of the notification of the situation, and the date, start time, and end time of engine operation for these purposes.
   vii. The Permittee shall maintain each record in a form suitable and readily accessible for review in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), (c)]

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

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

r. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1.B.3.p and q above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b), (e) and 40 CFR 63.6650(f)] The summary report shall also include any reporting required under Section 2.1 B.3.i, above, as necessary. [40 CFR 63.6603(a), Table 2d]

s. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake horsepower that operates for the purpose specified in Section 2.1 B.3.m.iii.(A) above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]

C. Up to nine natural gas/No. 2 fuel oil-fired simple cycle combustion turbines (ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity each	15A NCAC 02D .0521
Nitrogen Oxides	See Section 2.1 C.2.	15A NCAC 02D .0524 [40 CFR Part 60 Subpart KKKK]
Sulfur Dioxide	0.90 pounds SO_2 per megawatt-hour or fuel sulfur content of 0.060 pounds SO_2 per million Btu heat input	15A NCAC 02D .0524 [40 CFR Part 60 Subpart KKKK]
Nitrogen Oxides	75 ppm by volume corrected to 15 percent oxygen when fired with natural gas. 95 ppm by volume corrected to 15 percent oxygen when fired with No. 2 fuel oil.	15A NCAC 02D .1408
Nitrogen Oxides	0.15 pounds per million Btu when burning natural gas and 0.18 pounds per million Btu when burning No. 2 fuel oil	15A NCAC 02D .1418
Carbon Monoxide	Less than 250 tons per consecutive 12-month period – (See Section 2.2 A.1)	15A NCAC 02Q .0317 PSD Avoidance
Sulfur Dioxide	Less than 250 tons per consecutive 12-month period – (See Section 2.2 A.2)	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides (as NO_2)	Less than 250 tons per consecutive 12-month period – (See Section 2.2 A.3)	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides	Less than 100 tons per consecutive 12-month period – (See Section 2.2 A.4)	15A NCAC 02Q .0317 NAA NSR Avoidance
Volatile Organic compounds	Less than 100 tons per consecutive 12-month period – (See Section 2.2 A.5)	15A NCAC 02Q .0317 NAA NSR Avoidance
NO_X and SO_2	**Federal-Enforceable Only Cross State Air Pollution Rules** (See Section 2.3)	40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC

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

a. Visible emissions from the combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** 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 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in the combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d).**

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

a. For combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)**, the Permittee shall comply with all applicable provisions, including the requirements for emissions standards, testing, monitoring, recordkeeping, notification, and reporting, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart KKKK "Standards of Performance for Stationary Combusttion Turbines," including Subpart A "General Provisions."

b. The Permittee shall comply with the following emissions standards (except during startup, shutdown, and malfunction):
   i. NO_X emissions for any combustion turbine (heat input at peak load (HHV) > 50 million Btu and ≤ 850 million Btu per hour) shall not exceed 25 ppm at 15 percent O_2, when fired with natural gas.
   ii. NO_X emissions for any combustion turbine (heat input at peak load (HHV) > 50 million Btu and ≤ 850 million Btu per hour) shall not exceed 74 ppm at 15 percent O_2, when fired with No. 2 fuel oil.
   iii. NO_X emissions for any combustion turbine (generator output of ≤ 30 MW electric) shall not exceed 150 ppm at 15 percent O_2, if the turbine operates at less than 75 percent of peak load or if the turbine operating temperature is less than 0^oF.
   iv. NO_X emissions for any combustion turbine (generator output of > 30 MW electric) shall not exceed 96 ppm at 15 percent O_2, if the turbine operates at less than 75 percent of peak load or if the turbine operating temperature is less than 0^oF.
   v. If the total heat input to any combustion turbine is greater than or equal to 50 percent natural gas, the above corresponding NO_X emission limit for natural gas shall apply when burning that fuel. Similarly, when the total heat input to any combustion turbine is greater than 50 percent No. 2 fuel oil, the above corresponding emission limit for No. 2 fuel oil shall apply for the duration of the time that the No. 2 fuel oil is burned.
   vi. The SO_2 emissions from each combustion turbine shall not exceed 0.9 pounds per megawatt-hour gross output, or the Permittee shall not allow any fuel to be burned in each combustion turbine, which contains total potential sulfur emissions in excess of 0.06 pounds per million Btu heat input each (fuel sulfur content limit). The Permittee has chosen to comply with the fuel sulfur content limit.
   [40 CFR 60.4320(a), 60.4325 and 60.4330, and Table 1 to the 40 CFR Part 60, Subpart KKKK]

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

c. The Permittee shall conduct an initial performance test and submit a written report for NO_X for one of the combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)**[1] within 180 days of initial start-up of the first combustion turbine (any one unit from ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d) or within 60 days after the first combustion turbine (any one unit from ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d) achieves maximum production, whichever occurs first. The Permittee shall conduct the initial performance test as specified in 40 CFR 60.4400(a) in accordance with General Condition JJ and as follows:
   i. The initial performance test for NO_X shall be conducted at ± 25 percent of 100 percent peak load or at the highest achievable load point if at least 75 percent peak load cannot be achieved in practice.
   ii. Three runs shall be required for the performance test and each run shall last for a minimum of 20 minutes.
   iii. Separate performance testing is required for each fuel.
   iv. The ambient temperature for each test run shall be above 0^0F.
   v. Compliance with the applicable emission limit in 40 CFR 60.4320 must be demonstrated at each tested load level.
   vi. The operating parameters that are continuously monitored as described in Section 2.1.C.2.e below, must be monitored during the performance test to establish acceptable values and ranges.

   If three-run arithmatic average of NO_X emissions from the performance test is above the emission limit for NO_X in Section 2.1 C.2.b above, at any load level tested, or the initial stack test is not performed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
   [40 CFR 60.8, 60.4340, 60.4355, and 60.4400]

[1] DAQ is requiring initial performance test on only one of nine combustion turbines (ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d). This requirement is contingent upon the stack test results of the tested turbine showing that the margin of compliance with NO_X emission limit is sufficient.

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

d. The Permittee shall operate and maintain the combustion turbines including dry low NO_X burners and any other monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions and in accordance with manufacturer's guidelines at all times including during start-up, shutdown, and malfunction. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the the combuston turbines are not operated according to the general compliance requirements. [40 CFR 60.4333]

e. To ensure compliance with the NO_X emissions limits in Section 2.1 C.2.b.i through iv above, the Permittee shall use a parametric monitoring system per 40 CFR 60.4340(b)(2)(ii). The Permittee shall monitor each combustion turbine to ensure the low-NO_X combustion mode is operating properly by maintaining a "minimum pilot" as recommended by the engine manufacturer. In accordance with 40 CFR 60.4355, 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:
   i. Include the indicators to be monitored and show there is a significant relationship to emissions and proper operation of the NO_X emission controls,
   ii. Pick ranges (or designated conditions) of the indicators, or describe the process by which such range (or designated condition) will be established,
   iii. Explain the process used to make certain that data obtained are representative of the emissions or parameters being monitored (such as detector location, installation specification if applicable),
   iv. Describe quality assurance and control practices that are adequate to ensure the continuing validity of the data,
   v. Describe the frequency of monitoring and the data collection procedures which will be used, and
   vi. Submit justification for the proposed elements of the monitoring. If a proposed performance specification differs from manufacturer recommendations, provide an explanation for the differences. Submit the data supporting the justification. Engineering assessments and other data may be provided or explain why performance testing is unnecessary to establish indicator ranges. When establishing indicator ranges, simplifying the process by treating the parameters as if they were correlated may be used. Using this assumption, testing can be divided into two cases:
      (A) All indicators are significant only on one end of range. In this case, conduct a study so that each parameter is at the significant limit of its range while conducting emissions testing. If the emissions tests show that the source is in compliance at the significant limit of each parameter, then as long as each parameter is within its limit, compliance is presumed.
      (B) Some or all indicators are significant on both ends of the range. In this case, conduct a study so that each parameter that is significant at both ends of its range assumes its extreme values in all possible combinations of the extreme values (either single or double) of all of the other parameters. For example, if there were only two parameters, A and B, and A had a range of values while B had only a minimum value, the combinations would be A high with B minimum and A low with B minimum. If both A and B had a range, the combinations would be A high and B high, A low and B low, A high and B low, A low and B high. For the case of four parameters all having a range, there are 16 possible combinations.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the parameter monitoring plan is not developed or kept on-site, or the plan does not meet the requirements in this Section 2.1 C.2.e.
   [40 CFR 60.4340(b)(2)(ii) and 60.4355]

f. To ensure compliance with the sulfur dioxide emission limits in Section 2.1 C.2.b.vi above, the Permittee shall demonstrate that the maximum total sulfur content is 0.05 weight percent (500 ppmw) for the No. 2 fuel oil combusted in the turbines and is 20 grains of sulfur per 100 standard cubic feet for the natural gas combusted in the turbines, by using the fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract or by monitoring the total sulfur content of the fuel being fired in the turbine in accordance with 40 CFR 60.4360. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the Permittee does not make the above demonstration for natural gas and fuel oil, or the demonstration indicate that the total sulfur contents of natural gas or fuel oil exceed the total sulfur content limit of 20 grains per 100 standard cubic feet or 0.05 weight percent (500 ppmw), respectively, or the SO_2 emissions from the combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** exceed the emissions limits in Section 2.1 C.2.b.vi above.
   [40 CFR 60.4365]

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

g. The Permittee shall submit a notification of the date construction of an affected facility **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** is commenced, postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]

h. The Permittee shall submit a notification of the date of initial start-up of an affected facility **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)**, postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]

i. The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) for the combustion turbines. The Permittee shall report excess emissions for all periods of operation, including start-up, shutdown, and malfunction. These reports shall be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.4375(a), 60.4380(c), and 60.4395]
   i. For turbines required to monitor combustion parameters or parameters that document proper operation of the NO_X emission controls:
      (A) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.
      (B) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.
   ii. If the Permittee chooses the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime shall be defined as follows [40 CFR 60.4385]:
      (A) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
      (B) If the option to sample each delivery of fuel oil has been selected, the Permittee shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. The Permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and the Permittee shall evaluate excess emissions according to this Section 2.1 C.2.i.ii.(A) above. When all of the fuel from the delivery has been burned, the Permittee may resume using the as-delivered sampling option.
      (C) 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 of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

j. The Permittee shall submit a summary report of monitoring and record keeping activities given in Section 2.1.C.2.d through f above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .1408 STATIONARY COMBUSTION TURBINES

a. The combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b)** shall comply with the following RACT requirements for NO_X upon start-up, for combustion turbines with a heat input greater than 100 million Btu per hour but less than or equal to 250 million Btu per hour:
   i. NO_X emissions shall not exceed 75 ppm by volume corrected to 15 percent oxygen when fired with natural gas.
   ii. NO_X emissions shall not exceed 95 ppm by volume corrected to 15 percent oxygen when fired with No. 2 fuel oil.

   If necessary, the Permittee shall install combustion modification technology or other NO_X control technology to comply with the above emission standards.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1408.

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

c. Compliance with the emission standards in Section 2.1 C.3.a above, for the combustion turbines shall be determined using a continuous emissions monitoring system or using annual source testing according to 15A NCAC 02D .1415. If the Permittee determines compliance with the emission standards in Section 2.1 C.3.a above, for any combustion turbine using the continuous emissions monitoring system, the Permittee shall comply with continuous emissions monitoring system requirements in Section 2.1 C.4.c below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1408 if the requirements of this Section 2.1 C.3.c are not complied with, or if the NO_X emissions exceed the limits included in this Section 2.1 C.3.c.

d. The Permittee may choose not to burn natural gas or No. 2 fuel oil in the combustion turbines during the ozone season. If the Permittee chooses not to burn a particular fuel, the source testing required in Section 2.1 C.3.b above, for that fuel is not required.

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

e. The reporting requirements in Section 2.1 C.4.d and e below, shall be sufficient to ensure compliance with 15A NCAC 02D .1408, if the Permittee determines compliance with the emission standards in Section 2.1 C.3.a above, for any combustion turbine using the continuous emissions monitoring system.

f. The Permittee shall submit a summary report of monitoring and record keeping activities given in Section 2.1.C.3.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1418: NEW ELECRIC GENERATING UNITS, BOILERS, COMBUSTION TURBINES, AND I/C ENGINES

a. For any combustion turbine **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b)**, if serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity, the NO_X emissions shall not exceed 0.15 pounds per million Btu when burning natural gas and 0.18 pounds per million Btu when burning No. 2 fuel oil.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1418.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .1404(d) through (g)]

c. The Permittee shall ensure compliance with 15A NCAC 02D .1418 by determining nitrogen oxide emissions in pounds per million Btu using a CEMS. Per 15A NCAC 02D .1404, the CEMS shall be installed, operated, and maintained according to 40 CFR Part 75, Subpart H.
   i. The procedures specified in 40 CFR Part 75, Subpart D shall be used to supply missing data and the quality assurance and quality control requirements in 40 CFR Part 75, Subpart H shall be used.
   ii. Monitors shall be installed before the first ozone season in which the source will operate and shall be operated each day during the ozone season that the source operates.
   iii. Compliance with this emission standard shall be determined as follows:
      (A) Hourly continuous emission monitoring system values shall be averaged over a 24-hour block period beginning at midnight.
      (B) To compute the 24-hour block average, the average hourly values shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75.

   If any 24-hour block average exceeds the emission limit, or, if these monitoring and recordkeeping requirements are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1418.

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

d. The Permittee shall submit the continuous emissions monitoring system data showing the 24-hour daily block values for periods of excess nitrogen oxide emissions postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and postmarked on or before 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.

e. CEMs Monitor Availability - The Permittee shall submit the nitrogen oxide CEM systems monitor downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and postmarked on or before July 30 of each calendar year for the preceding six-month period between January and June.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Four diesel-fired emergency generators (ID Nos. ES-6 through ES-9)
Up to nine natural gas/No. 2 fuel oil-fired simple cycle combustion turbines (ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Carbon Monoxide	less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance
Sulfur Dioxide	less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides (as NO_2)	less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen Oxides	less than 100 tons per consecutive 12-month period	15A NCAC 02Q .0317 NAA NSR Avoidance
Volatile Organic compounds	less than 100 tons per consecutive 12-month period	15A NCAC 02Q .0317 NAA NSR Avoidance

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the emergency generators **(ID Nos. ES-6 through ES-9)** and combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** shall discharge into the atmosphere less than 250 tons of carbon monoxide total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The hours of operation for each emergency generator shall not exceed 500 hours per consecutive 12-month period.

d. The Permittee shall keep monthly records in a logbook (written or electronic format) of the hours of operation of each emergency generator and each combustion turbine. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained, or if the hours of operation for each emergency generator exceed 500 hours per consecutive 12-month period.

e. The Permittee shall perform emissions calculations on a monthly basis and record them in a logbook (written or electronic format), according to the following formulas, as applicable:

$$\text{CO emissions (ton/12 months)} = \left\{ \sum_{i=1}^{12} \left[0.0055 \ \frac{\text{lb}}{\text{hp-hr}} \times e_2 \left(\frac{\text{hp-hr}}{\text{month}} \right) \right] + \sum_{i=1}^{12} \left[45.87 \ \frac{\text{lb}}{\text{hr}} \times t_{ng} \left(\frac{\text{hr}}{\text{month}} \right) \right] + \sum_{i=1}^{12} \left[7.08 \ \frac{\text{lb}}{\text{hr}} \times t_d \left(\frac{\text{hr}}{\text{month}} \right) \right] \right\} / 2000 \ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{CO emissions (ton/12 months)} = \left\{ \sum_{i=1}^{12} \left[0.0055 \ \frac{\text{lb}}{\text{hp-hr}} \times e_2 \left(\frac{\text{hp-hr}}{\text{month}} \right) \right] + \sum_{i=1}^{12} \left[45 \ \frac{\text{lb}}{\text{hr}} \times t_{ng} \left(\frac{\text{hr}}{\text{month}} \right) \right] + \sum_{i=1}^{12} \left[10.6 \ \frac{\text{lb}}{\text{hr}} \times t_d \left(\frac{\text{hr}}{\text{month}} \right) \right] \right\} / 2000 \ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{CO emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.0055\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[11.4\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[11.40\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{CO emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.0055\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[27.36\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[14.52\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_2 = energy usage in hp-hr per month for each emergency generator
t_{ng} = hours of operation per month for each combustion turbine when fired with natural gas
t_d = hours of operation per month for each combustion turbine when fired with No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the emissions of carbon monoxide from emergency generators and combustion turbines for any consecutive 12-month period exceed the limit in Section 2.2 A.1.a above.

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

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.2 A.1.c through e above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly carbon monoxide emissions for the previous 17 months for emergency generators and combustion turbines. The emissions must be calculated for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the emergency generators **(ID Nos. ES-6 through ES-9)** and combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** shall discharge into the atmosphere less than 250 tons of sulfur dioxide total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. Emergency generators and combustion turbines shall comply with the monitoring/recordkeeping requirements in Sections 2.2 A.1.c and d above to ensure compliance with Section 2.2 A.2.a above. If the Permittee does not ensure compliance with the requirements of Sections 2.2 A.1.c and d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

d. The Permittee shall perform emissions calculations on a monthly basis and record them in a logbook (written or electronic format), according to the following formula:

$$\text{SO}_2\ \text{Emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[1.21\text{x}10^{-5}\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[3.43\text{x}10^{-3}\ \frac{\text{lb}}{\text{million Btu}} \times h_{ng}\left(\frac{\text{million Btu}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[0.033\ \frac{\text{lb}}{\text{million Btu}} \times h_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_2 = energy usage in hp-hr per month for each emergency generator
h_{ng} = heat input per month for each combustion turbine when fired with natural gas
h_d = heat input per month for each combustion turbine when fired with No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the emissions of sulfur dioxide from emergency generators and combustion turbines for any consecutive 12-month period exceed the limit in Section 2.2 A.2.a above.

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

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.2 A.2.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly sulfur dioxide emissions for the previous 17 months for emergency generators and combustion turbines. The emissions must be calculated for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the emergency generators **(ID Nos. ES-6 through ES-9)** and combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** shall discharge into the atmosphere less than 250 tons of nitrogen oxides (as NO_2) total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall comply with the monitoring/recordkeeping requirements in Section 2.2 A.4.c and d below. If the Permittee does not comply with the requirements in Section 2.2 A.4.c. and d below, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

d. The reporting requirements for NO_X in Section 2.2 A.4. e below, shall be sufficient to ensure compliance with NO_X (as NO_2) emission limit in Section 2.2 A.3.a above.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0531: SOURCES IN NONATTAINMENT AREAS

a. In order to avoid applicability of 15A NCAC 02D .0531 for major sources and major modifications, the emergency generators **(ID Nos. ES-6 through ES-9)** and combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** shall discharge into the atmosphere less than 100 tons of nitrogen oxides per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

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

c. Emergency generators and combustion turbines shall comply with the monitoring and recordkeeping requirements in Sections 2.2 A.1.c and d, above, to ensure compliance with Section 2.2 A.4.a above. If the Permittee does not ensure compliance with the requirements of Section 2.2 A.1.c and d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

d. The Permittee shall perform emissions calculations on a monthly basis and record them in a logbook (written or electronic format), according to the following formulas, as applicable:

$$\text{NO}_X \text{ emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.024\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[48\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[80\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{NO}_X \text{ emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.024\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[30\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[49\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{NO}_X \text{ emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.024\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[11.30\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[43.4\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{NO}_X \text{ emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[0.024\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[23\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[40\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_2 = energy usage in hp-hr per month for each emergency generator
t_{ng} = hours of operation per month for each combustion turbine when fired with natural gas
t_d = hours of operation per month for each combustion turbine when fired with No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531 if the above records are not kept or if the emissions of nitrogen oxides from emergency generators and combustion turbines for any consecutive 12-month period exceed the limit in Section 2.2 A.4.a above.

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

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.2 A.4.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly nitrogen oxides emissions for the previous 17 months for emergency generators and combustion turbines. The emissions must be calculated for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0531: SOURCES IN NONATTAINMENT AREAS

a. In order to avoid applicability of 15A NCAC 02D .0531 for major sources and major modifications, the emergency generators **(ID Nos. ES-6 through ES-9)** and combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b, OR, ES-10c through ES-18c, OR, ES-10d through ES-18d)** shall discharge into the atmosphere less than 100 tons of VOC total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

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

c. Emergency generators and combustion turbines shall comply with the monitoring/recordkeeping requirements in Sections 2.2 A.1.c. and d above, to ensure compliance with Section 2.2 A.5.a above. If the Permittee does not ensure compliance with the requirements of Section 2.2 A.1.c and d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

d. The Permittee shall perform emissions calculations on a monthly basis and record them in a logbook (written or electronic format), according to the following formulas, as applicable:

$$\text{VOC emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[7.05\text{x}10^{-4}\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[2.96\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[1.51\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{VOC emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[7.05\text{x}10^{-4}\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[2.60\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[2\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{VOC emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[7.05\text{x}10^{-4}\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[6.53\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[4.57\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

OR

$$\text{VOC emissions (ton/12 months)} = \left\{\sum_{i=1}^{12}\left[7.05\text{x}10^{-4}\ \frac{\text{lb}}{\text{hp-hr}} \times e_2\left(\frac{\text{hp-hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[3.32\ \frac{\text{lb}}{\text{hr}} \times t_{ng}\left(\frac{\text{hr}}{\text{month}}\right)\right] + \sum_{i=1}^{12}\left[0.69\ \frac{\text{lb}}{\text{hr}} \times t_d\left(\frac{\text{hr}}{\text{month}}\right)\right]\right\} / 2000\ \frac{\text{lb}}{\text{ton}}$$

Where: e_2 = energy usage in hp-hr per month for each emergency generator
t_{ng} = hours of operation per month for each combustion turbine when fired with natural gas
t_d = hours of operation per month for each combustion turbine when fired with No. 2 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531 if the above records are not kept or if the emissions of VOC from emergency generators and combustion turbines for any consecutive 12-month period exceed the limit in Section 2.2 A.5.a above.

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

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.2 A.5.c and d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly VOC emissions for the previous 17 months for emergency generators and combustion turbines. The emissions must be calculated for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

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

Emission Source ID No.	Emission Source Description[1,2]
IES-3	10,000 gallon No. 2 fuel oil storage tank
IES-4	1,000 gallon diesel fuel storage tank
IES-5	1,000 gallon diesel fuel storage tank
IES-6	8,000 gallon diesel fuel storage tank
IES-7	8,000 gallon diesel fuel storage tank
IES-8	8,000 gallon diesel fuel storage tank
IES-9	8,000 gallon diesel fuel storage tank
IES-10	1,000 gallon diesel fuel storage tank
IES-11	1,000 gallon diesel fuel storage tank
IES-12	1,000 gallon diesel fuel storage tank
IES-13	1,000 gallon diesel fuel storage tank

[1] Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
[2] When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

2.4 Cross State Air Pollution Rule (CSAPR) Permit Requirements

1. For the four combustion turbines **(ID Nos. ES-10a through ES-13a, OR, ES-10b through ES-13b)**, the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NO_X Annual Trading Program" and Subpart CCCCC "TR SO_2 Group 1 Trading Program".

SECTION 3 - 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 NO_X 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
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.