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Secretary

MICHAEL ABRACZINSKAS  
Director



NORTH CAROLINA  
Environmental Quality

Enter XX or Calendar Date

Mr. Anthony Falbo  
COO  
Concord Energy, LLC  
5087 Junction Road  
Lockport, NY 14094

SUBJECT: Air Quality Permit No. 09985T05  
Facility ID: 1300164  
Concord Energy, LLC  
Concord  
Cabarrus County  
Fee Class: Title V  
PSD Class: Major

Dear Mr. Falbo:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 09985T05 authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

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

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



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

Mr. Anthony Falbo  
Enter XX or Calendar Date  
Page 2

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

Cabarrus County has triggered increment tracking under PSD for PM<sub>10</sub> and SO<sub>2</sub>. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from **(Enter Permit Issuance Date)** until **(Enter Permit Expiration Date)**, 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 Eric L. Crump, P.E. at (919) 707-8470 or eric.crump@deq.nc.gov.

Sincerely yours,

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

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review)  
Laserfiche (Facility ID: 1300164)  
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](mailto:oah.postmaster@oah.nc.gov) with all questions regarding the filing fee and/or the details of the filing process.

## Summary of Changes to Permit

The following changes were made to Air Permit No. 09985T04:\*

Page No.	Section	Description of Changes
Cover and throughout	---	<ul style="list-style-type: none"> <li>• Updated all dates and permit revision numbers</li> <li>• Replaced all instances of “§” in CFR citations with “40 CFR Part” as appropriate</li> </ul>
Insignificant Activities List	Attachment	Moved to Section 3 of permit
2	Table of Contents	<ul style="list-style-type: none"> <li>• Changed Section 3 from “General Conditions” to “Insignificant Activities per 15A NCAC 02Q .0503(8)”</li> <li>• Added new Section 4, “General Permit Conditions”</li> </ul>
3	List of Acronyms	Relocated here (formerly last page of permit)
4	1	<ul style="list-style-type: none"> <li>• Removed “Formerly the CMS Charlotte Energy LLC facility” header from table</li> <li>• Removed “thermal oxidizer” from description of control device ID No. CD-FLARE1-CON</li> </ul>
5	2.1A 2.1 A.2	Format revisions made to limit/standards summary table Updated section to reflect the most current stipulations for 15A NCAC 02D .0524, 40 CFR Part 60, Subpart KKKK
8	2.1 A.3 2.1 A.3.c	Updated section to reflect the most current stipulations for 15A NCAC 02D .0317 (avoidance of 15A NCAC 02D. 0531) Simplified equation and made minor clarifications to explanations of equation variables
10	2.1 B 2.1 B.1.c, 2.c	<ul style="list-style-type: none"> <li>• Format revisions made to limit/standards summary table</li> <li>• Changed all mentions of “flare thermal oxidizer” and “thermal oxidizer” to “enclosed flare” and “flare” throughout section</li> </ul> Added appropriate source ID number
11	2.1 C 2.1 C.1.c and 2.c	Format revisions made to limit/standards summary table Added appropriate source ID numbers
12	2.1 C.3	Updated section to reflect the most current stipulations for 15A NCAC 02D .0524 and 40 CFR Part 60, Subpart JJJJ
13	2.1 C.4 2.1 C.5	Updated section to reflect the most current stipulations for 15A NCAC 02D .1111 and 40 CFR Part 63, Subpart ZZZZ Updated section to reflect the most current stipulations for 15A NCAC 02D .1409, Stationary Internal Combustion Engines. Included MRR requirements (satisfied by meeting NSPS JJJJ MRR requirements).
15	2.1 D 2.1 D.2	Format revisions made to limit/standards summary table <ul style="list-style-type: none"> <li>• Updated section to reflect the most current stipulations for 15A NCAC 02D .0524, 40 CFR Part 60, Subpart GG</li> <li>• Combined paragraphs a and b into a single paragraph, combined paragraphs c and d into a single paragraph, and relettered paragraphs accordingly</li> </ul>
17	2.2 A	Updated section to reflect the most current stipulations for 15A NCAC 02D .0524, 40 CFR Part 60, Subpart WWW

Page No.	Section	Description of Changes
18	2.2 B	Updated section to reflect the most current stipulations for 15A NCAC 02D .1100, Control of Toxic Air Pollutants
19	2.2 C	Updated section to reflect the most current stipulations for 15A NCAC 02D .0711, Emission Rates Requiring a Permit
20	2.3	Deleted permit shields for “State BACT demonstration, G.S. 62-133.8” and “G.S. 143-215.107(a)”
21	3	Section 3 is now “Insignificant Activities per 15A NCAC 02Q .0503(8)”
22-29	4	Updated General Conditions to version 7.0 dated August 23, 2023

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



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
09985T05	09985T04	XXXX	XXXX

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:** **Concord Energy, LLC**  
**Facility ID:** **1300164**  
**Primary SIC Code:** **4911**  
**NAICS Code:** **221119**

**Facility Site Location:** **5185 Morehead Road**  
**City, County, State, Zip:** **Concord, Cabarrus County, North Carolina, 28027**  
**Mailing Address:** **5085 Junction Road**  
**City, State, Zip:** **Lockport, New York, 14094**

**Application Number:** **1300164.22A**  
**Complete Application Date:** **October 28, 2022**

**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 **XXXXXX**, 2023.

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

## Table of Contents

### LIST OF ACRONYMS

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

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 Permit Shield for Non-applicable Requirements

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

SECTION 4: GENERAL PERMIT CONDITIONS

## List of Acronyms

<b>AOS</b>	Alternative Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>BAE</b>	Baseline Actual Emissions
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAM</b>	Compliance Assurance Monitoring
<b>CEMS</b>	Continuous Emission Monitoring System
<b>CEDRI</b>	Compliance and Emissions Data Reporting Interface
<b>CFR</b>	Code of Federal Regulations
<b>CO</b>	Carbon Monoxide
<b>COMS</b>	Continuous Opacity Monitoring System
<b>CSAPR</b>	Cross-State Air Pollution Rule
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>GHGs</b>	Greenhouse Gases
<b>HAP</b>	Hazardous Air Pollutant
<b>LAER</b>	Lowest Achievable Emission Rate
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NAICS</b>	North American Industry Classification System
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>NSR</b>	New Source Review
<b>OAH</b>	Office of Administrative Hearings
<b>PAE</b>	Projected Actual Emissions
<b>PAL</b>	Plantwide Applicability Limitation
<b>PM</b>	Particulate Matter
<b>PM<sub>2.5</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>PTE</b>	Potential to Emit
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>TAP</b>	Toxic Air Pollutant
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound



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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-TURB1-CON <b>NSPS KKKK</b>	Stationary landfill gas-fired (No. 2 fuel oil startup) combustion turbine (63.44 million Btu per hour heat input) with one associated electrical generator (5,900 kW output)	None	None
ES-TURB2-CON <b>NSPS KKKK</b>	Stationary landfill gas-fired (No. 2 fuel oil startup) combustion turbine (63.44 million Btu per hour heat input) with one associated electrical generator (5,900 kW output)	None	None
ES-ICE1-CON <b>NSPS JJJJ</b> <b>GACTION ZZZZ</b> <b>RACT</b>	Landfill gas-fired, spark ignition, reciprocating internal combustion engine (2233 hp) with one associated electrical generator (1600 kW output)	None	None
ES-ICE2-CON <b>NSPS JJJJ</b> <b>GACTION ZZZZ</b> <b>RACT</b>	Landfill gas-fired, spark ignition, reciprocating internal combustion engine (2233 hp) with one associated electrical generator (1600 kW output)	None	None
ES-Pretreat-CON	Regeneration Gas Injection Siloxane Removal System	CD-FLARE1-CON	One enclosed flare (8.85 million Btu per hour heat input, 295 scfm maximum flow rate)
ES-TURB1-CHAR <b>NSPS GG</b>	Stationary landfill gas-fired (No. 2 fuel oil startup) combustion turbine (63.84 million Btu per hour heat input) with one associated electrical generator (5,900 kW output)	None	None

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

#### A. Two stationary landfill gas-fired (No. 2 fuel oil startup) combustion turbine (ID Nos. ES-TURB1-CON and ES-TURB2-CON) with one associated electrical generator

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Sulfur dioxide	Less than or equal to 0.15 lbs per million Btu heat input	15A NCAC 02D .0524 40 CFR Part 60 Subpart KKKK
Nitrogen dioxide	96 ppm at 15 percent O <sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh)	15A NCAC 02D .0524 40 CFR Part 60 Subpart KKKK
	Less than 100 tons of NO <sub>x</sub> per consecutive 12-month period and less than 560 lbs/day during the ozone season (May 1 through September 30)	15A NCAC 02Q .0317 Nonattainment Area Avoidance
Toxic Air Pollutants	<b>State-enforceable only</b> <b>See Section 2.2.A</b>	15A NCAC 02D .1100

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

- a. Visible emissions from combustion turbines (**ID Nos. ES-TURB1-CON and ES-TURB2-CON**) shall not be more than 20 percent opacity each when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of landfill gas or No. 2 fuel oil in any turbine.

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

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

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

- b. The following emission limitations apply to the turbines (**ID No. ES-TURB1-CON and ES-TURB2-CON**):
  - i. Limit fuel sulfur dioxide emissions to less than or equal to 0.15 lbs per million Btu. [40 CFR Part 60.4330(a)(3)]
  - ii. Limit nitrogen dioxide emissions to 96 ppm @ 15% O<sub>2</sub> or 590 ng/J of useful output (4.7 lbs/MWh). [40 CFR Part 60.4320]

**Testing Requirements** [40 CFR 60.4415] – SO<sub>2</sub>

- c. SO<sub>2</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). The Permittee may use one of the following methodologies to conduct the performance tests.
  - i. The Permittee can periodically determine the sulfur content of the fuel combusted in the turbine. Using this methodology, a representative fuel sample would be collected by an automatic sampling system following ASTM D5287 (incorporated by reference, see 40 CFR 60.17) for natural gas or landfill gas or ASTM D4177 (incorporated by reference, see 40 CFR 60.17) for oil. Alternatively, for oil, the Permittee may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see 40 CFR 60.17). The fuel analyses of this section may be performed either by the Permittee, a service contractor retained by the Permittee, a fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
    - (A) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, D5453, D5623, or D7039 (all incorporated by reference, see 40 CFR 60.17); or
    - (B) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standards 2140, 2261, or 2377 (all incorporated by reference, see 40 CFR 60.17).
  - ii. The Permittee can measure the SO<sub>2</sub> concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of 40 CFR 60. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19–10–1981–Part 10, “Flue and Exhaust Gas Analyses,” manual methods for sulfur dioxide (incorporated by reference, see 40 CFR 60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 CFR 60, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO<sub>2</sub> emission rate:

$$E = \frac{(1.664 \times 10^{-7}) \times (SO_2)_c \times Q_{std}}{P} \quad (\text{Eq. 6})$$

Where:

- E = SO<sub>2</sub> emission rate, in pounds per megawatt-hour (lb/MWh)
- 1.664 × 10<sup>-7</sup> = conversion constant, in pounds per dry standard cubic foot-ppm (lb/dscf-ppm)
- (SO<sub>2</sub>)<sub>c</sub> = average SO<sub>2</sub> concentration for the run, in ppm
- Q<sub>std</sub> = stack gas volumetric flow rate, in dscf per hour (dscf/hr)
- P = gross electrical and mechanical energy output of the combustion turbine, in megawatts (MW) (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 CFR 60.4350(f)(2).

- iii. The Permittee can measure the SO<sub>2</sub> and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in Appendix A of 40 CFR 60. In addition, the Permittee may use the manual methods for sulfur dioxide in ASME PTC 19–10–1981–Part 10 (incorporated by reference, see 40 CFR 60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40 CFR 60 to calculate the SO<sub>2</sub> emission rate in lb/mmBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR 60.4350(f) to calculate the SO<sub>2</sub> emission rate in lb/MWh.

**Testing Requirements** [40 CFR 60.4400] – NO<sub>x</sub>

- d. NO<sub>x</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test) or every 2 years (no more than 26 calendar months following the previous performance test) as specified in 40 CFR 60.4340(a).
  - i. There are two general methodologies that the Permittee may use to conduct the performance tests. For each test run:
    - (A) Measure the NO<sub>x</sub> concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of 40 CFR 60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 CFR 60, and measure and record the

electrical and thermal output from the unit. Then, use the following equation to calculate the NO<sub>x</sub> emission rate:

$$E = \frac{(1.194 \times 10^{-7}) \times (NO_x)_c \times Q_{std}}{P} \quad (\text{Eq. 5})$$

Where:

- E = NO<sub>x</sub> emission rate, in lb/MWh  
 $1.194 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm  
 $(NO_x)_c$  = average NO<sub>x</sub> concentration for the run, in ppm  
 $Q_{std}$  = stack gas volumetric flow rate, in dscf/hr  
P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 CFR 60.4350(f)(2); or

- (B) Measure the NO<sub>x</sub> and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 CFR 60 to calculate the NO<sub>x</sub> emission rate in lb/mmBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR 60.4350(f) to calculate the NO<sub>x</sub> emission rate in lb/MWh.
- ii. Sampling traverse points for NO<sub>x</sub> and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- iii. Notwithstanding Section 2.1 A.2.d.ii above, the Permittee may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in Appendix A Part 60 if the following conditions are met:
- (A) The Permittee may perform a stratification test for NO<sub>x</sub> and diluent pursuant to the procedures specified in Section 6.5.6.1(a) through (e) of Appendix A of 40 CFR 75.
- (B) Once the stratification sampling is completed, the Permittee may use the following alternative sample point selection criteria for the performance test:
- (1) If each of the individual traverse point NO<sub>x</sub> concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points, then the Permittee may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO<sub>x</sub> concentration during the stratification test; or
- (2) For turbines with a NO<sub>x</sub> standard less than or equal to 15 ppm @ 15% O<sub>2</sub>, the Permittee may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO<sub>x</sub> concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points.
- e. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. The Permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. The Permittee must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.
- i. If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.
- ii. Compliance with the applicable emission limit in 40 CFR 60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO<sub>x</sub> emission rate at each tested level meets the applicable emission limit in 40 CFR 60.4320.

- iii. If the Permittee elects to install a continuous emissions monitoring system (CEMS), the performance evaluation of the CEMS may either be conducted separately or (as described in 40 CFR 60.4405) as part of the initial performance test of the affected unit.
- iv. The ambient temperature must be greater than 0 °F during the performance test.

**Monitoring** [40 CFR 60.4400]

- f. Combustion turbines not using water or steam injection to control NO<sub>x</sub> emissions, must perform annual performance tests in accordance with 40 CFR 60.4400 to demonstrate continuous compliance. If the NO<sub>x</sub> emission result from the performance test is less than or equal to 75 percent of the NO<sub>x</sub> emission limit for the turbine, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO<sub>x</sub> emission limit for the turbine, the applicant shall resume annual performance tests. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these monitoring requirements are not met.

**Reporting** [40 CFR 60.4375 and 60.4395]

- g. Sulfur Dioxide: For each affected unit required to periodically determine the fuel sulfur content under this Subpart, the Permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.
- h. Nitrogen Oxides: For each affected unit that performs an annual performance test in accordance with 40 CFR 60.4340, the Permittee shall submit a written report of the results of each performance test before the close of business on the 60<sup>th</sup> day following the completion of the performance test.
- i. The Permittee shall submit a summary report of the monitoring as required by Sections 2.1 A.2.f through h 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 02Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 02D .0902(f): REASONABLY AVAILABLE CONTROL TECHNOLOGY**

- a. In order to avoid applicability of this regulation, combustion turbines (**ID Nos. ES-TURB1-CON, ES-TURB2-CON** and the flare (**CD-FLARE1-CON**) shall discharge into the atmosphere less than 100 tons of nitrogen dioxide per consecutive 12-month period and less than 560 pounds of nitrogen dioxide per day during the ozone season (May 1 through September 30).

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

- b. If emission testing is required, the Permittee shall perform such testing in accordance with 15A NCAC General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

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

- c. In order to ensure compliance, NO<sub>x</sub> emissions shall be calculated on a monthly basis.
  - i. Each calendar month, the Permittee shall calculate the NO<sub>x</sub> emissions of each turbine for the previous month and the previous 12-month period to ensure compliance with this Condition.
  - ii. Each day during the ozone season (May 1 through September 30), the Permittee shall calculate the NO<sub>x</sub> daily emissions.
  - iii. Monthly NO<sub>x</sub> emissions, in tons, shall be calculated as follows:

$$E_{NOx} = [(A_{NOx} \times t_{landfill\ gas}) + (B_{NOx} \times t_{No.2\ fuel\ oil}) + (Flare \times t_{landfill\ gas})] \times \left( \frac{1\ ton\ NOx}{2000\ lbs\ NOx} \right)$$

Where:

- E<sub>NOx</sub> = total tons of NO<sub>x</sub> emitted per month
- A<sub>NOx</sub> = 6.86 lbs NO<sub>x</sub> emitted per hour when firing landfill gas only<sup>1</sup>
- B<sub>NOx</sub> = 111.65 lbs NO<sub>x</sub> emitted per hour when firing No. 2 fuel oil<sup>2</sup>

<sup>1</sup> Initial performance test results report November 25, 2013

<sup>2</sup> AP-42 default value (0.88 lbs NO<sub>x</sub> per million Btu \* 126.88 million Btu per hour (total) = 111.65 lbs NO<sub>x</sub> per hour

- t<sub>landfill gas</sub> = number of hours per month turbine or flare fires landfill gas
- t<sub>No. 2 fuel oil</sub> = number of hours per month turbine fires No. 2 fuel oil
- Flare = AP-42 default value (0.35 lbs NO<sub>x</sub> /hour)

Consecutive 12-month rolling NO<sub>x</sub> emissions (tons), shall be calculated by summing the monthly emissions, as determined above, for the previous 17-month period for each turbine unit.

- iv. If the Permittee fails to complete the required daily and monthly calculations, or if the NO<sub>x</sub> emissions as calculated above equals or exceeds 100 tons per year or 560 pounds per day during the ozone season, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0531.

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

- d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly nitrogen dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
  - ii. The daily hours of startup firing No. 2 fuel oil for each turbine.All instances of deviations from the requirements of this permit must be clearly identified.

**B. Regeneration Gas Injection Siloxane Removal System (ID No. ES-Pretreat-CON) with associated enclosed flare (ID No. CD-FLARE1-CON)**

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

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 lbs per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	<b>State-enforceable only See Section 2.2.B</b>	15A NCAC 02D .1100

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

- a. Emissions of sulfur dioxide from the flare (**ID No. CD-FLARE1-CON**) 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. [15A NCAC 02D .0516]

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

- c. No monitoring or recordkeeping is required for sulfur dioxide emissions from landfill gas firing in the flare (**ID No. CD-FLARE1-CON**).

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

- a. Visible emissions from the flare (**ID No. CD-FLARE1-CON**) shall not be more than 20 percent opacity each when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of landfill gas in the flare (**ID No. CD-FLARE1-CON**).

**C. Two landfill gas-fired, spark ignition, reciprocating internal combustion engines with associated electrical generators (ID Nos. ES-ICE1-CON and ES-ICE2-CON)**

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

<b>Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxide	2.0 g/hp-hr	15A NCAC 02D .0524 40 CFR Part 60, Subpart JJJJ
Carbon Monoxide	5.0 g/hp-hr	
Volatile Organic Compounds	1.0 g/hp-hr	
Hazardous Air Pollutants	Compliance with NSPS JJJJ per 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	15A NCAC 02D .1111
Nitrogen Oxide	Less than 2.5 grams/hp-hour	15A NCAC 02D .1409(b) Reasonably Available Control Technology

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

- a. Emissions of sulfur dioxide from each engine/generator set (**ID No. ES-ICE1-CON and ICE2-CON**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from firing landfill gas in the engines (**ID No. ES-ICE1-CON and ICE2-CON**).

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

- a. Visible emissions from each engine/generator set (**ID Nos. ES-ICE1-CON and ICE2-CON**) shall not be more than 20 percent opacity each 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.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of landfill gas in the engines (**ID No. ES-ICE1-CON and ICE2-CON**).



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

**Applicability** [15A NCAC 02Q .0508(f), 40 CFR 60.4200(a)(2)(i)]

- a. For the engines (**ID Nos. ES-ICE1-CON and ES-ICE2-CON**), 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 JJJJ, "Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines," including Subpart A "General Provisions."

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

- b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

**Emission Standards** [15A NCAC 02Q .0508(f), 40 CFR 60.4233(e)]

- c. The Permittee shall comply with the following emission standards:

Engine type	Maximum engine power, horsepower (hp)	Manufacture date (after)	Emission standards, grams/hp-hour		
			NO <sub>x</sub>	CO	VOC
Landfill Gas Lean Burn-	≥ 500	July 1, 2010	2.0	5.0	1.0

[40 CFR 60.4233(e), Table 1 of 40 CFR 60, Subpart JJJJ]

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

- d. If performance testing is required, the testing shall be performed in accordance 40 CFR 60.8 and 60.4244. If these testing requirements are not met or the results of the test are above the limits in Section 2.1 C.3.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- e. The Permittee shall comply with the emission standards in Section 2.1 C.3.c by:
  - i. purchasing an engine certified according to the procedures in 40 CFR 60 Subpart JJJJ for its respective model year [40 CFR 60.4243(b)(1)]; and
  - ii. operate and maintain the certified stationary spark ignition (SI) internal combustion engine (ICE) and control device according to the manufacturer's emission-related written instructions. The Permittee shall also meet the requirements as specified in 40 CFR part 1068, Subparts A through D, as they apply to the Permittee. [40 CFR 60.4243(a)(1)]

OR

  - iii. purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Section 2.1 C.3.c above and according to the requirements specified in Section 2.1 C.3.d above. [40 CFR 60.4243(b)(2)]; and
  - iv. keeping a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]; and
  - v. In addition, the Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)] The initial test shall be conducted within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup of the engine. [40 CFR 60.8(a)]
- f. The Permittee shall operate and maintain the stationary SI ICE that achieve the emission standards as required in Section 2.1 C.3.c over the entire life of the engine. [40 CFR 60.4234]
- g. If applicable, air-to-fuel ratio (AFR) controllers shall be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements in Section 2.1 C.3.e through g are not met.

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

- i. The Permittee shall keep the following records:

- i. all notifications submitted to comply with 40 CFR 60 and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
- ii. maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
- iii. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
- iv. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]

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

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

- j. The following notification and reporting requirements apply:
  - i. For engines that do not meet the requirements of Section 2.1 C.3.e.i and ii above (i.e, that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231), the Permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in 40 CFR 60.4245(c). [40 CFR 60.4245(c)]
  - ii. The Permittee shall provide the DAQ at least 30 days prior notice of any performance test, except as otherwise specified in 40 CFR 60.8(d) [40 CFR 60.8(d)]
  - iii. The Permittee shall submit a copy of each performance test within 60 days after the test has been completed. [40 CFR 60.4245(d)]
  - iv. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 C.3.c through i above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

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

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

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

- a. For these sources (**ID Nos. ES-ICE1-CON and ES-ICE2-CON**), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

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

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

**5. 15A NCAC 02D .1409(b) "Stationary Internal Combustion Engines"**

- a. Emissions of NO<sub>x</sub> from the lean-burn gas-fired stationary internal combustion engines (**ID Nos. ES-ICE1-CON and ES-ICE2-CON**) with a rated capacity of 650 horsepower or more that are not covered under 15A NCAC 02D .1409(c) and are not covered by 15A NCAC 02D .1418 shall not exceed 2.5 grams/hp-hour.
- b. If the emissions from either of these engines (**ID Nos. ES-ICE1-CON and ES-ICE2-CON**) exceed the applicable limitation in Section 2.1 C.5.a above after reasonable effort as defined in 15A NCAC 02D .1401, or if the requirements of 15A NCAC 02D .1409(b) are not RACT for either of these engines, the Permittee may petition the Director for an alternative limitation or standard according to rule 15A NCAC 02D .1412.

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

- c. If source testing is used to determine compliance with the rules in this Section, the methods and procedures in 15A NCAC 02D .2600 shall be used.
- d. If source testing is required, the Permittee shall maintain records of tests performed to demonstrate compliance with this Section according to 15A NCAC 02D .1404. All instances of noncompliance with the requirements of this permit shall be clearly identified.

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

- e. The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Section 2.1 C.3. If these requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1409(b).

#### D. One stationary landfill gas-fired (No. 2 fuel oil startup) combustion turbine with one associated electrical generator (ID No. ES-TURB1-CHAR)

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Sulfur Dioxide	Limit total fuel sulfur content to less than or equal to 0.80 percent by weight (8000 ppmw).	15A NCAC 02D .0524 40 CFR Part 60
Nitrogen Dioxide	Limit nitrogen dioxide emissions to less than or equal to 0.0189 percent by volume at 15% O <sub>2</sub> and on a dry basis.	Subpart GG
Toxic Air Pollutants	<b>State-enforceable only</b> <b>See Section 2.2.B</b>	15A NCAC 02D .1100

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

- a. Visible emissions from the combustion turbine (**ID No. ES-TURB1-CHAR**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1. D.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, or reporting is required for visible emissions from the firing of landfill gas or No. 2 fuel oil in this turbine (**ID No. ES-TURB1-CHAR**).

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

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

**Emission Standards/Limitations:**

- a. The following emission standards apply to the gas turbine (**ID No. ES-TURB1-CHAR**)::
- i. Limit total fuel sulfur content to less than or equal to 0.80 percent by weight (8000 ppmw). [40 CFR 60.333]
  - ii. Limit nitrogen oxide emissions to less than or equal to 0.0189 percent by volume at 15% O<sub>2</sub> and on a dry basis. [40 CFR 60.332]

**Testing** [40 CFR 60.335]

- b. If additional testing is required, the testing shall be performed in accordance with 40 CFR 60.335 and General Condition JJ. If the results are above the limits given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with the SO<sub>2</sub> and/or NO<sub>x</sub> standard in 40 CFR 60, Subpart GG. [40 CFR 60.335]

**Monitoring** [40 CFR 60.334(j)]

- c. Monitoring for sulfur content of the landfill gas shall be conducted on a semi-annual basis demonstrating compliance with 40 CFR 60.333. The analysis procedure shall be "length of tube" method in which sorbent that is sensitive to H<sub>2</sub>S is used to detect the presence of this compound in gas samples, and the amount of sorbent that changes color when exposed to a sample is used to determine the concentrations of the compound.
- d. For the affected unit that periodically determines the fuel sulfur content under this Subpart, the Permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.
- e. No monitoring is required for nitrogen content of the landfill gas.

- f. If these monitoring requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Reporting** [40 CFR 60.334(j)]

- g. The Permittee shall submit a summary report of the monitoring and recordkeeping requirements given in Sections 2.1 D.2.c through e above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

## **2.2 Multiple Emission Source(s) Specific Limitations and Conditions**

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

1. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart WWW, "Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification on or After May 30, 1991, but Before July 18, 2014," including Subpart A "General Provisions."
2. The Permittee shall route all collected landfill gas to a treatment system that compresses, dewateres, and filters the landfill gas in accordance with 40 CFR Part 60, Subpart WWW. [40 CFR Part 60.752(b)(2)(iii)]

**State-enforceable only**

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

Pursuant to 15A NCAC 02D .1100 "Control of Toxic Air Pollutants," and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

<b>Emission Source</b>	<b>Toxic Air Pollutant</b>	<b>Emission Limit</b>
Combustion Turbine ( <b>ID No. ES-TURB1-CON</b> )	Benzene	166.74 lbs/year
Combustion Turbine ( <b>ID No. ES-TURB2-CON</b> )	Hydrogen chloride	0.927 lbs/hour
Combustion Turbine ( <b>ID No. ES-TURB1-CHAR</b> )		
Enclosed Flare ( <b>ID No. CD-FLARE1-CON</b> )		

**State-enforceable only****C. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT**

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

<b>Pollutant</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
Acrylonitrile	-----	0.4	0.22	-----
Benzene	8.1	-----	-----	-----
Carbon disulfide	-----	3.9	-----	-----
Dichlorobenzene(p),	-----	-----	-----	16.8
Ethylene dichloride (1,2- dichloroethane)	260	-----	-----	-----
Hexane, n	-----	23	-----	-----
Hydrogen chloride (hydrochloric acid)	-----	-----	-----	0.18
MEK (methyl ethyl ketone, 2-butanone)	-----	78	-----	22.4
MIBK (methyl isobutyl ketone)	-----	52	-----	7.6
Mercury - alkyl compounds, total mass (Component of HGC) (MERCALKYL)	-----	0.0013	-----	-----
Methylene chloride	1600	-----	0.39	-----
Perchloroethylene (tetrachloroethylene)	13000	-----	-----	-----
Toluene	-----	98	-----	14.4
Vinyl chloride	26	-----	-----	-----
Vinylidene chloride	-----	2.5	-----	-----



## 2.3 Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following nonapplicable requirement [15A NCAC 02Q .0512(a)(1)(B)]:

Reasonably Available Control Technology (RACT) does apply to **(ID Nos. ES-TURB1-CON and ES-TURB2-CON (@ 63.44 million Btu per hour heat input each) and (ID Nos. ES-TURB1-CHAR (@ 63.84 million Btu per hour heat input))** because they are located at a facility that has potential NO<sub>x</sub> emissions greater than 100 tpy and 560 pounds per day during the ozone season. However, there are no applicable requirements because Regulation 15A NCAC 02D .1408: Stationary Combustion Turbines only applies to combustion turbines with a heat input value greater than 100 million Btu per hour and less than 250 million Btu per hour.

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

<b>Emission Source ID No.</b>	<b>Emission Source Description<sup>1,2</sup></b>
IES-1-CON	Maintenance and upkeep (painting, maintenance, etc.)
IES-2-CON	Diesel fuel storage tank (2,000 gallon capacity)
IES-3-CON	Condensate storage tank (10,000 gallon capacity)
IES-4-CON	New oil storage tank (1,000 gallon capacity)
IES-5-CON	Used oil storage tank (1,000 gallon capacity)
IES-6-CHAR	Diesel fuel storage tank (800 gallon capacity)

<sup>1</sup>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.

<sup>2</sup> When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

## SECTION 4 - GENERAL CONDITIONS (version 7.0, 08/21/2023)

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

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
  2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
  3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
  4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
  5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
  6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]  
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.
- C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]  
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.
- D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]  
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:
- Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641
- All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).
- E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]  
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Title V Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

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

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

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

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

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

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

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

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

**J. RESERVED**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or

- d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]  
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.
- Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]  
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.
- AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]  
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.
- BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]  
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.
- CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]
  1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
  2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
  3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.
- DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]  
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
- EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]  
The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.
- FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]  
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.
- GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]  
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.
- HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]  
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).
- II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]  
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of



the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

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

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

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

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

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.

4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

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

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

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

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

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

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

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
  - a. The written notification shall include:
    - i. a description of the change at the facility;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

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

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