



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary  
B. Keith Overcash, P.E., Director

DRAFT

Mr. Tracy Robinson  
Plant Manager  
Rockingham Power, LLC Generation Facility  
240 Ernest Drive  
Reidville, NC 27320

SUBJECT: Air Quality Permit No. 08731T06  
Facility ID: 7900156  
Rockingham Power, LLC Generation Facility  
Reidsville, North Carolina  
Rockingham County  
Fee Class: Title V

Dear Mr. Robinson:

In accordance with our letter of March 24, 2006, notifying you that your Title V permit will be reopened pursuant to 15A NCAC 2Q .0517, we are forwarding herewith Air Quality Permit No. 08731T06 to Rockingham Power, LLC Generation Facility, Reidsville, Rockingham County, North Carolina authorizing the operation, as outlined in Part I, and the construction and/or operation, as outlined in Part II, 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 2Q .0503 have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **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.

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Permitting Section  
1641 Mail Service Center, Raleigh, North Carolina 27699-1641  
2728 Capital Blvd., Raleigh, North Carolina 27604  
Phone: 919-715-6235 / FAX 919-733-5317 / Internet: [www.ncair.org](http://www.ncair.org)

One  
North Carolina  
*Naturally*

Mr. Tracy Robinson

DRAFT

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If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in **writing** to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

**The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 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 GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.**

This Air Quality Permit shall be effective from \_\_\_\_\_ until November 30, 2007, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. The Phase II Acid Rain permit requirements shall be effective from January 1, 2005 until December 31, 2009.

The changes made to the permit are summarized in the attachment to this letter. Should you have any questions concerning this matter, please contact Mr. Edward L. Martin, P.E., at (919) 715-6283.

Sincerely yours,

Laura S. Butler, P.E.  
Chief

Enclosure

c: Gregg Worley, EPA Region 4 with review  
Myron Whitley, Winston-Salem Regional Office  
Central Files

Attachment:

The following changes were made to the Rockingham Power, LLC Generation Facility Air Permit No. 08731T06:

Page(s)	Part, Section	Change
Cover	-	Amended permit numbers and dates.
4	Part I, Section 2.1 A regulation table	Replaced Federal-only 40 CFR 52 Subpart II and State-only 2D .0521 visible emission limits/standards with new approved SIP 2D .0521 visible emission limits/standards.
4-5	Part I, Section 2.1 A.1 (old Sections 2.1 A.1 and 2)	Replaced State-only 2D .0521 and Federal-only 40 CFR 52 Subpart II visible emission Sections 2.1 A.1 and 2 with new approved SIP 2D .0521 visible emission Section 2.1 A.1. Changed subsequent condition numbers.
6	Part I, Section 2.1 A.3.i	Added footnote "b" to the "lb/hr" and "lb/mmBtu" nitrogen oxides emission limits to show those limits are based on a 24-hour rolling average. Added footnote "b" to the carbon monoxide emission limits.
8	Part I, Section 2.1 A.3.h	Added noncompliance language in second sentence to say: "If any 24-hour rolling average exceeds the limits specified in Section 2.1 A. 3. a. i. (except during startup, shutdown or malfunction as allowed by Section 2.1 A. 3. a. i) or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530."
8	Part I, Section 2.1 A.3.i	Added monitoring and recordkeeping condition for the carbon monoxide CEMS.
8	Part I, Section 2.1 A.3.j.i	Removed reference to periods of excess emissions.
8	Part I, Section 2.1 A.3.j.ii	Revised reporting language to clarify PSD reporting requirements. Removed reference to an excess emissions (calculated according to the requirements of 40 CFR 60.13(h)) and monitoring systems performance report.
8	Part I, Section 2.1 A.3.j.iii	Added reporting condition for the carbon monoxide CEMS.
9	Part I, Section 2.1 A.4.d	Removed NOx interim reporting which required reporting tons of nitrogen oxides emitted during the previous May and June no later than July 30 of each year, since this requirement has been removed from the 2D .1404(g) rule.
11	Part I, Section 2.1 C regulation table	Replaced Federal-only 40 CFR 52 Subpart II and State-only 2D .0521 visible emission limits/standards with new approved SIP 2D .0521 visible emission limits/standards.
11	Part I, Section 2.1 C.2 (old Sections 2.1 C.2 and 3)	Replaced State-only 2D .0521 and Federal-only 40 CFR 52 Subpart II visible emission Sections 2.1 C.2 and 3 with new approved SIP 2D .0521 visible emission Section 2.1 C.2. Changed subsequent condition number.

13	Part I, Section 2.1 D regulation table	Replaced Federal-only 40 CFR 52 Subpart II and State-only 2D .0521 visible emission limits/standards with new approved SIP 2D .0521 visible emission limits/standards.
13	Part I, Section 2.1 D.2 (old Sections 2.1 D.2 and 3)	Replaced State-only 2D .0521 and Federal-only 40 CFR 52 Subpart II visible emission Sections 2.1 D.2 and 3 with new approved SIP 2D .0521 visible emission Section 2.1 D.2. Changed subsequent condition number.
17-23	Part I, Section 3.A, B, M, P and JJ	Corrected references.
19	Part I, Section 3.I.B	Revised this condition (generic change being made to all permits).
20	Part I, Section 3.P	Changed compliance certification date from January 30 to March 1 (generic change being made to all permits).

**List of Insignificant Activities under 15A NCAC 2Q .0503(8)**

<b>Emission Source I.D.</b>	<b>Emission Source Description</b>	<b>Insignificant Activity Regulation</b>
-	343 gallon emergency generator diesel fuel tank	2Q .0503(8)
-	187 gallon fire pump diesel fuel tank	2Q .0503(8)
-	paved roads and parking lot	2Q .0503(8)

State of North Carolina,  
Department of Environment  
and Natural Resources

Division of Air Quality



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date *	Expiration Date *
08731T06	08731R05	DRAFT	November 30, 2007

\* Effective and expiration dates for the Phase II Acid Rain portion of this permit may differ from these dates.

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, and to construct and operate, as outlined in Part II, 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, Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC Subchapter 2Q, 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:** **Rockingham Power, LLC  
Generating Facility**

**Facility ID:** 7900156  
**Facility Site Location:** 240 Ernest Drive  
**City, County, State, Zip:** Reidsville, Rockingham County, NC 27230

**Mailing Address:** 240 Ernest Drive  
**City, State, Zip:** Reidsville, Rockingham County, NC 27230

**Application Number:** 7900156.06A  
**Complete Application Date:** March 24, 2006  
**Renewal Application Due Date:** February 28, 2007 (Phase II Acid Rain portion may differ)

**Primary SIC Code:** 4911  
**Division of Air Quality,** Winston-Salem Regional Office  
**Regional Office Address:** 585 Waughtown Street, Winston-Salem, NC 27889

Permit issued this the \_\_\_\_ day of \_\_\_\_\_, 2006.

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Laura S. Butler, P.E., Chief, Air Permits Section  
By Authority of the Environmental Management Commission

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### **PART II**

This permit does not include a Part II.

### ATTACHMENTS

List of Acronyms  
Acid Rain Permit Application dated June 14, 2004

# PART I

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified. However, state-enforceable-only requirements are enforceable only by DAQ, and neither EPA nor citizens have authority to enforce state-enforceable-only requirements.

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the air permit application.

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

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

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
ES-1 through ES-5 PSD NSPS	five No. 2 fuel oil/natural gas-fired simple-cycle internal combustion turbines (1,875 million Btu per hour maximum heat input rate when firing natural gas, 1,789 million Btu per hour maximum heat input rate when firing No. 2 fuel oil) each equipped with dual fuel dry low-NO <sub>x</sub> combustors and water injection for NO <sub>x</sub> control	N/A	N/A
ES-FT-1 and ES-FT-2 PSD NSPS	two No. 2 fuel oil fixed-roof storage tanks (not to exceed 2.25 million gallons capacity each, actual capacity 1.7 million gallons each) with atmospheric vents	N/A	N/A
ES-EG-1 PSD	one No. 2 fuel oil fired stand-by emergency generator (300 kW capacity)	N/A	N/A
ES-FP-1 PSD	one No. 2 fuel oil fired emergency fire water pump (133 HP capacity)	N/A	N/A

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1- Emission Source(s) Specific Limitations and Conditions

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

**A. Five No. 2 fuel oil/natural gas-fired simple-cycle internal combustion turbines (1,875 million Btu per hour maximum heat input rate when firing natural gas, 1,789 million Btu per hour maximum heat input rate when firing No. 2 fuel oil) each equipped with dual fuel dry low-NOx combustors and water injection for NO<sub>x</sub> control**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	20 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521
sulfur dioxide	as defined in specific conditions	15A NCAC 2D .0524 (40 CFR Part 60 Subpart GG)
nitrogen oxides	as defined in specific conditions	15A NCAC 2D .0524 (40 CFR Part 60 Subpart GG)
	as defined in specific conditions	15A NCAC 2D .1417
various	as defined in specific conditions	15A NCAC 2D .0530

#### 1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than **20 percent opacity** (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(c)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ.

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

- c. To assure compliance, the Permittee shall perform a Method 9 test for 1 hour using a preapproved protocol to be submitted in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ before the source operates more than 1100 hours using No. 2 fuel oil. This monitoring protocol shall be repeated before each subsequent 1100 hours of operation from the last test. No opacity monitoring is required while the source is burning natural gas.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

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

- e. The permittee shall submit the results of the Method 9 test within 30 days of completion of the test or at the end of the quarter. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60 SUBPART GG)**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 2D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart GG, including Subpart A "General Provisions." [15A NCAC 2D .0524]
- b. NSPS Emissions Limitations [15A NCAC 2D .0524]  
As required by 15A NCAC 2D .0524, the following permit limits shall not be exceeded:

Affected Facility	Pollutant	Emission Limit
combustion turbines (ID Nos. ES-CT1 through ES-CT5)	nitrogen oxides	STD* = $0.0075 \times [(14.4) / Y^{**}]$ + F <sup>***</sup>
	sulfur dioxide	0.015 percent by volume <sup>****</sup> or 0.8 percent weight sulfur in fuel

\* STD = allowable nitrogen oxides emissions in percent by volume at 15 percent O<sub>2</sub> on a dry basis.  
 \*\* Y = manufacturer's rated heat rate at manufacturer's rated load or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. Y shall not exceed 14.43 kJ/w-h.  
 \*\*\* F = NO<sub>x</sub> emission allowance for fuel bound nitrogen as defined in 40CFR60.332(a)(3).  
 \*\*\*\* allowable sulfur dioxide emissions at 15 percent O<sub>2</sub> on a dry basis.

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

- c. As an alternate to the fuel sulfur content monitoring as specified in 40 CFR 60.334(b) to demonstrate compliance with the sulfur dioxide standard in 40 CFR 60.333, the DAQ has approved a custom fuel monitoring schedule per DAQ letter dated August 17, 2000.
- d. As an alternate to the continuous water-to-fuel injection rate monitoring and fuel monitoring requirements specified in 40 CFR 60.334(a) and (b), the Permittee shall demonstrate compliance with the nitrogen oxide emission limit in 40 CFR 60.332 for each combustion turbine using a nitrogen oxide continuous emissions monitoring system (CEMS) meeting the following requirements:
  - i. Each CEMS shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring quality of the system.
  - ii. Each CEMS must be capable of calculating nitrogen oxide emissions concentrations corrected to 15% O<sub>2</sub>.

- iii. The Permittee shall keep continuous records of the ambient temperature, ambient humidity and combustor inlet pressure so that the CEMS data can be corrected to ISO standard ambient conditions anytime in the future to demonstrate compliance with the emission standard if requested by the Division of Air Quality.
- iv. Monitor data availability shall be no less than 95 percent on a quarterly basis.
- v. Each CEMS should provide a minimum of 4 data points for each hour and calculate a 1-hour average.
- vi. Recordkeeping requirements shall follow the requirements specified in 40 CFR 60.7.

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

- e. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions for sulfur dioxide shall be reported for any daily period during which the sulfur content of the fuel being fired exceeds 0.8 percent by weight, within thirty days after each calendar year quarter for the previous 3-month period;
  - f. The Permittee shall submit an excess emissions (calculated according to the requirements of 40 CFR 60.13(h)) and monitoring systems performance report and/or a summary report form and monitoring report for the nitrogen oxide CEMS within 30 days after each calendar year quarter for the previous 3-month period. Written reports shall include information required in 40 CFR 60.7(c) and (d). This report shall also contain a clearly calculated corresponding emission limitation as specified in 40 CFR 60.332; and
  - g. The Permittee shall submit in writing the sulfur content of the No. 2 fuel oil fired in the combustion turbines and the number of hours of operation of each combustion turbine, within 30 days after each calendar year quarter for the previous 3-month period.
- All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

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

AFFECTED SOURCE	POLLUTANT	BACT EMISSION LIMITS <sup>a</sup>				BACT CONTROLS
		Natural Gas		No. 2 Fuel Oil		
		lb/hr	lb/mmBtu	lb/hr	lb/mmBtu	
combustion turbines (ID Nos. ES-CT-1 through ES-CT-5), each	opacity	20%	---	20%		combustion control
	nitrogen oxides	104 <sup>b</sup>	0.0575 <sup>b</sup> 15ppmvd <sup>b</sup>	294 <sup>b</sup>	0.171 <sup>b</sup> 42ppmvd <sup>b</sup>	dry low NOx and water injection
	sulfur dioxide	2	0.001	82	0.0474	0.047% sulfur fuel oil
	carbon monoxide	104 <sup>b</sup>	0.0575 <sup>b</sup>	213 <sup>b</sup>	0.124 <sup>b</sup>	combustion control
	VOCs	6	0.0032	8	0.0047	combustion control
	particulates/PM-10	6	0.0032	23	0.0135	combustion control
	sulfuric acid	0.14	0.00008			0.047% sulfur fuel oil

<sup>a</sup> BACT limits shall apply at all times except as provided in Section 2.1 A.3.a.i.i.

<sup>b</sup> Based on a 24-hour rolling average calculated using only actual operating hours (periods of zero emissions when not operating are not included).

- i. Emissions resulting from startup, shutdown or malfunction above those given in Section 2.1 A.3.a.i. are permitted during operation below 70% load provided that optimal operational practices are adhered to and periods of excess emissions are minimized.

Emissions of nitrogen oxides shall not exceed 60 ppmvd below 55% load and shall not exceed 42 ppmvd between 55% and 70% load.

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

AFFECTED SOURCE	POLLUTANT	BACT EMISSION LIMIT <sup>a</sup> (tons per rolling consecutive 12-month period)
combustion turbines (ID Nos. ES-CT-1 through ES-CT-5), total	nitrogen oxides	1255
	sulfur dioxide	215
	carbon monoxide	1052.5
	volatile organic compounds	50
	particulates/PM-10	87.5

<sup>a</sup> emissions for the combustion turbines are for 1000 hours per year operation on fuel oil and 2000 hours per year on natural gas, at 100% load and ISO standard ambient conditions.

**Testing** [15A NCAC 2D .0501]

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.3. a. i. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. The maximum annual hours of operation for each combustion turbine shall not exceed 3000 full load equivalent hours per rolling consecutive 12-month period and shall not exceed 1000 full load equivalent hours per rolling consecutive 12-month period when firing No. 2 fuel oil. Only natural gas shall be burned during summer months (April through October) except during operational curtailment, recall of release capacity by firm transportation holders, Force Majeure events, and malfunctions. For purposes of this paragraph, "operational curtailment" shall mean when an interstate pipeline company or a local distribution company is unable to deliver, or restricts delivery of, gas to the Permittee; and "recall of release capacity" shall mean when holders of firm transportation rights (called capacity) that have allocated, released, or assigned, either permanently or temporarily, all or part of that capacity to others recall some or all of such capacity. The Permittee shall record and maintain records of the actual number of hours of operation when firing each fuel for each combustion turbine. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records of actual number of hours of operation for each combustion turbine firing each fuel are not maintained.
- d. The amounts of each fuel combusted in each combustion turbine during each day shall be recorded and maintained. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records of amounts of each fuel combusted in each combustion turbine are not maintained.
- e. The sulfur content of the No. 2 fuel oil shall not exceed 0.047 percent by weight.
- f. In order to ensure that the sulfur dioxide (SO<sub>2</sub>) ambient concentrations at the James River Face Wilderness Area (Virginia) are below the Class I Significant Impact Levels (SILs), the maximum heat input shall not exceed 1789 million Btu per hour when firing No. 2 fuel oil<sup>1</sup>. To assure the above heat input is not exceeded, either (1) a fixed orifice shall be placed in the No. 2 fuel oil supply line to each combustion turbine to restrict fuel flow, or (2) a controls modification shall be made to limit the maximum oil flow to each turbine. The heat input in pounds per million Btu for each turbine for each hour (at a minimum) of operation shall be recorded and maintained. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records of heat input in pounds per million Btu for each turbine for each hour (at a minimum) of operation are not maintained.
- g. The permittee shall monitor the sulfur content of the fuel being fired as specified in Section 2.1 A.2.c.
- h. The permittee shall demonstrate compliance with the nitrogen oxide emission limits specified in Section 2.1

<sup>1</sup> based on worst-case operating conditions of 33EF and higher heating value (HHV) of 19,845 Btu per pound of fuel oil

A. 3. a. i. by determining nitrogen oxide emissions as specified in Section 2.1 A.2. d. If any 24-hour rolling average exceeds the limits specified in Section 2.1 A. 3. a. i. (except during startup, shutdown or malfunction as allowed by Section 2.1 A. 3. a. i) or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

i. The permittee shall demonstrate compliance with the carbon monoxide emission limits specified in Section 2.1 A. 3. a. i. using a continuous emissions monitoring system (CEMS) meeting the following requirements:

- i. Each CEMS shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring quality of the system.
- ii. Monitor data availability shall be no less than 95 percent on a quarterly basis.
- iii. Each CEMS should provide a minimum of 4 data points (equally spaced) for each hour and calculate a 1-hour average.
- iv. Recordkeeping requirements shall follow the requirements specified in 40 CFR 60.7.

If any 24-hour rolling average exceeds the limits specified in Section 2.1 A. 3. a. i. (except during startup, shutdown or malfunction as allowed by Section 2.1 A. 3. a. i) or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

j. The Permittee shall submit in writing the following reports by January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September:

- i. Any daily period during which the sulfur content of the No. 2 fuel oil being fired exceeds 0.047 percent by weight, as determined by the monitoring requirements in Section A.2.c.
- ii. A summary monitoring report showing all 24-hour rolling averages for the nitrogen oxide CEMS data for periods of **excess emissions**, using only actual operating hours, in units of the limit in Section A.3. a. i. (lb/hr, lb/mmBtu and ppm). For periods of startup, shutdown and malfunction, excess nitrogen oxide emissions to be reported are defined (per Section 2.1 A.3.a.i) as emissions exceeding 60 ppmvd below 55% load and emissions exceeding 42 ppmvd between 55% and 70% load. This report shall also contain the emission limitations as specified in Section A.3. a. i.
- iii. A summary monitoring report showing all 24-hour rolling averages for the carbon monoxide CEMS data for periods of **excess emissions** (excluding periods of startup, shutdown and malfunction below 70% load; but including periods of startup, shutdown and malfunction at or above 70% load), using only actual operating hours, in units of the limit in Section A.3. a. i. (lb/hr and lb/mmBtu). This report shall also contain the emission limitations as specified in Section A.3. a. i.

**4. 15A NCAC 2D .1417: EMISSION ALLOCATIONS FOR LARGE COMBUSTION SOURCES**

- a. Except as allowed under Section 2.1 A.4.b below, individual sources at these facilities named in the table below shall not exceed during the ozone season the nitrogen oxide emission allocations in the table. [15A NCAC 2D .1417(b)(2)(A)]:

SOURCE	EMISSION ALLOCATIONS (TONS/SEASON) 2004	NO <sub>x</sub> EMISSION ALLOCATIONS (TONS/SEASON) 2005	NO <sub>x</sub> EMISSION ALLOCATIONS (TONS/SEASON) 2006 AND LATER
Combustion Turbine (ID No. ES-CT-1)	34	42	42
Combustion Turbine (ID No. ES-CT-2)	33	42	42
Combustion Turbine (ID No. ES-CT-3)	33	42	42
Combustion Turbine (ID No. ES-CT-4)	33	41	41
Combustion Turbine (ID No. ES-CT-5)	33	41	41

- b. Sources (ID Nos. ES-CT-1 through ES-CT-5) may comply with the requirements of 15A NCAC 2D .1417 using the nitrogen oxide budget trading program set out in 15A NCAC 2D .1419. If a source uses the nitrogen oxide budget trading program to comply, it shall have installed and begun operating by May 1, 2004, a continuous emissions monitoring system that complies with 40 CFR Part 96. [15A NCAC 2D .1417(d) and 15A NCAC 2D .1419 (b)(2)]

- c. **Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f), 15A NCAC 2D .1417(e), and 15A NCAC 2D .1404(d) and (h)]

The Permittee shall assure compliance with 15A NCAC 2D .1417 by determining nitrogen oxide emissions in tons per ozone season using a continuous emissions monitoring (CEM) system that meets the requirements of 40 CFR Part 75 Subpart H, with such exceptions as allowed under 40 CFR Part 75, Subpart H or 40 CFR 96. The Permittee shall comply with the recordkeeping requirements of 40 CFR 96, Budget Trading Program for State Implementation Plans. All instances of deviations from the requirements of this permit must be clearly identified. If nitrogen oxide emissions for any ozone season exceed the allowances held in the Compliance Account as of November 30 of each year or the recordkeeping requirements are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1417.

- d. **Reporting** [15A NCAC 2Q .0508(f), and 15A NCAC 2D .1404(g) and (h)]

The Permittee shall comply with the reporting requirements of 40 CFR 96, Budget Trading Program for State Implementation Plans. The Permittee shall report no later than October 30 the tons of nitrogen oxides emitted during the previous ozone season. One copy of this report shall be sent to the appropriate Regional Office and one copy shall be sent to the Stationary Source Compliance Supervisor at the address shown in General Condition D. All instances of deviations from the requirements of this permit must be clearly identified.

**B. Two No. 2 fuel oil fixed-roof storage tanks with atmospheric vents (not to exceed 2.25 million**

**gallons capacity each, actual capacity 1.7 million gallons each, ID Nos. ES-FT-1 and ES-FT-2)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
NA	recordkeeping	15A NCAC 2D .0524 (40 CFR Part 60 Subpart Kb)
volatile organic compounds	as defined in specific conditions	15A NCAC 2D .0530

**1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60 SUBPART Kb)**

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

- a. The Permittee shall comply with the recordkeeping requirements of this standard by maintaining readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels. All records shall be kept for the life of the source. These sources are exempt from the General Provisions (40 CFR Part 60, Subpart A) and from any other provisions of Subpart Kb. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

**2. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

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

POLLUTANT	BACT EMISSION LIMIT (tons/year)
volatile organic compounds	0.65 total

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

- b. The maximum storage volume for No. 2 fuel oil shall not exceed 1.7 million gallons at any given time for each tank.
- c. The combined maximum throughput for No. 2 fuel oil for both storage tanks shall not exceed 63,935,000 gallons per year.
- d. The recordkeeping requirement as included in Section 2.1 B. 1. shall be sufficient to monitor the maximum storage volume for No. 2 fuel oil in each tank.
- e. The Permittee shall keep records for each shipment (delivery) and the fuel consumed from each storage tank on a monthly basis for No. 2 fuel oil for both storage tanks in a written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the shipment (delivery) records are not maintained or the amount of fuel used is not monitored or the combined annual throughput for both storage tanks exceed the limit included above in Section 2.1 B. 2. c.

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

- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities within 30 days after each calendar year quarter, due and post marked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the following:
  - i. The shipment records for each delivery of No. 2 fuel oil.
  - ii. The monthly quantities of No. 2 fuel oil consumed from each storage tank for the previous 14 months.

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

**C. One No. 2 fuel oil fired stand-by emergency generator (300 kW capacity, ID No. ES-EG-1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521
various	as defined in specific conditions	15A NCAC 2D .0530

**1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and 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 2D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source.

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

- a. Visible emissions from these sources shall not be more than **20 percent opacity** (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(c)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and 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 2D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil in this source.

**3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. The following Best Available Control Technology (BACT) limit shall not be exceeded:  
i. Short-term maximum emission rates of emergency generator shall not exceed:

AFFECTED SOURCE	POLLUTANT	BACT EMISSION LIMITS				BACT CONTROLS
		Natural Gas		No. 2 Fuel Oil		
		lb/hr	lb/mmBtu	lb/hr	lb/mmBtu	
emergency generator (ID No. ES-EG-1)	opacity			20%	---	limited to 500 hours per year of operation
	nitrogen oxides			10.4	3.7	
	sulfur dioxide			0.13	0.05	
	carbon monoxide			2.24	0.8	
	VOCs			0.84	0.3	
	particulates/PM-10			0.74	0.3	
	sulfuric acid			0.01	0.0038	

- ii. Long term maximum emission rates of emergency generator shall not exceed:

POLLUTANT	BACT EMISSION LIMIT (tons/year)
nitrogen oxides	2.6
sulfur dioxide	0.03
carbon monoxide	0.56
volatile organic compounds	0.21
particulate/PM-10	0.19
sulfuric acid	0.0026

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

- b. The hours of operation for this source shall be less than 500 per consecutive 12-month period.  
c. The Permittee shall record monthly and total annually the hours of operation for this source. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities within 30 days after each calendar year quarter, due and post marked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

**D. One No. 2 fuel oil fired emergency fire water pump (133 HP capacity, ID No. ES-FP-1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521
various	as defined in specific conditions	15A NCAC 2D .0530

**1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and 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 2D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source.

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

- a. Visible emissions from these sources shall not be more than **20 percent opacity** (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(c)]

**Testing** [15A NCAC 2D .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil in this source.

**3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. The following Best Available Control Technology (BACT) limit shall not be exceeded:  
i. Short-term maximum emission rates of emergency fire water pump shall not exceed:

AFFECTED SOURCE	POLLUTANT	BACT EMISSION LIMITS		BACT CONTROLS
		Natural Gas	No. 2 Fuel Oil	

		lb/hr	lb/mmBtu	lb/hr	lb/mmBtu	
emergency fire pump (ID No. ES-FP-1)	opacity			20%	---	limited to 500 hours per year of operation
	nitrogen oxides			9.6	3.8	
	sulfur dioxide			0.12	0.05	
	carbon monoxide			2.1	0.8	
	VOCs			0.78	0.3	
	particulates/PM-10			0.68	0.3	
	sulfuric acid			0.01	0.0038	

- ii. Long term maximum emission rates of emergency fire water pump shall not exceed:

POLLUTANT	BACT EMISSION LIMIT (tons/year)
nitrogen oxides	2.4
sulfur dioxide	0.03
carbon monoxide	0.53
volatile organic compounds	0.2
pariculate/PM-10	0.17
sulfuric acid	0.0024

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

- b. The hours of operation for this source shall be less than 500 per consecutive 12-month period.  
c. The Permittee shall record monthly and total annually the hours of operation for this source. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities within 30 days after each calendar year quarter, due and post marked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

## 2.2- Phase II Acid Rain Permit Requirements

**ORIS code: 55116**

**Effective: January 1, 2005 through December 31, 2009**

### A. Statement of Basis

Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Department of Environment and Natural Resources, Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 2Q .0400 and 2Q .0500, and other applicable Laws.

### B. SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each affected unit

		2005	2006	2007	2008	2009
<b>CT1</b>	SO <sub>2</sub> allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	NA*	NA*	NA*	NA*	NA*
<b>CT2</b>						
<b>CT3</b>						
<b>CT4</b>						
<b>CT5</b>		NO <sub>x</sub> limit	NA**			

\* SO<sub>2</sub> allowances are not allocated by U.S. EPA for new units under 40 CFR part 72.

\*\* Does not apply for gas or oil-fired units.

### C. Comments, Notes and Justifications

None.

### D. Phase II Permit Application (attached)

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

Acid Rain Permit Application dated June 14, 2004

## SECTION 3 - GENERAL CONDITIONS

This section describes terms and conditions applicable to this Title V facility. All references to the “permit” in this section apply only to Part I of the permit.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
  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 2Q .0507(k) and .0508(i)(16)]  
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 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 Environment and Natural Resources upon request.
- C. **Severability Clause** [15A NCAC 2Q .0508(i)]  
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 2Q .0507(c)]  
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
- E. **Duty to Comply** [15A NCAC 2Q .0508(j)]  
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 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. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

1. Section 502(b)(10) Changes [15A NCAC 2Q .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.
2. Off Permit Changes [15A NCAC 2Q .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.
3. Emissions Trading [15A NCAC 2Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. **Reporting Requirements for Excess Emissions and Permit Deviations**

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

**"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 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (*Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.*)

**"Deviations"** - for the purpose 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.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (*e.g.*, quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .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 2D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 on the next business day after becoming aware of the deviation. A written report shall be submitted within two business days to the Regional Supervisor and shall include the probable cause of such deviation and any corrective actions or preventative actions taken. All reports of deviations from permit requirements shall be certified by a responsible official.

**I.B. Other Requirements under 15A NCAC 2D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535.

1. 15A NCAC 2D .0535(c). 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 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .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 the excess emissions are unavoidable.

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission

limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 2Q .0513(b)]

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q.0508(k)]

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 2Q.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 2Q .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 2Q .0508(f)]

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 2Q .0508(m)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceeding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. 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; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .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 2Q .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 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .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 2Q .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 2Q .0508(m)]

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

V. **Inspection and Entry** [15A NCAC 2Q .0508(r) 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 2Q .0508(o)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
  2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. 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 2Q .0519.
- X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]  
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .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 2Q .0107 and 2Q. 0508(n)]  
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .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 2Q .0107.
- Z. **Construction and Operation Permits** [15A NCAC 2Q .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 2Q .0100 and .0300.
- AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]  
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.
- BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .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 2Q .0501(e)]
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 2Q .0508(g)]  
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. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -**  
**FEDERALLY-ENFORCEABLE ONLY**  
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.
- FF. **Title IV Allowances** [15A NCAC 2Q .0508(h)]  
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 2D .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 2D .0300.

**HH. Registration of Air Pollution Sources** [15A NCAC 2D .0200]

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 2D .0202(b).

**II. Ambient Air Quality Standards** [15A NCAC 2D .0501(e)]

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 2D .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 2Q .0508(i)(16)]

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
  - a. a certification of the test results by sampling team leader and facility representative;
  - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
  - c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
  - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
  - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
  - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

**KK. Reopening for Cause** [15A NCAC 2Q .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 2Q .0513(c).
  3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .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 2Q .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 2Q .0508(f)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

## ATTACHMENT

### List of Acronyms

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<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>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<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>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound