



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. J. Mark Frederick
Plant Manager
Carolina Power and Light Company
491 Power Plant Road
Lumberton, NC 28358

SUBJECT: Air Quality Permit No. 06094T14
Facility ID: 7800147
Carolina Power and Light Company d/b/a Progress Energy Carolinas, Inc.
W. H. Weatherspoon Plant
Lumberton, North Carolina
Robeson County
Fee Class: Title V

Dear Mr. Frederick:

In accordance with your completed Air Quality Permit Application for a Title V permit renewal received January 26, 2005, we are forwarding herewith Air Quality Permit No. 06094T14 to Carolina Power and Light Company d/b/a Progress Energy Carolinas, Inc., Lumberton, Robeson County, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 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.

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

One
North Carolina
Naturally

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 _____, 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 Edward L. Martin, P.E. at (919) 715-6283.

Sincerely yours,

Donald R. van der Vaart, Ph.D., P.E.
Chief

Enclosure

c: Gregg Worley, EPA Region 4, with review
Steven Vozzo, Fayetteville Regional Office
Central Files

Attachment:

The following changes were made to the Progress Energy Weatherspoon Steam Electric Plant Air Permit No. 06094T14:

Page(s)	Part, Section	Change
Insignificant Activities List		
-	-	Updated ID Nos. 1-20 to IS-1 to IS-20 to match ESM. <u>Added to list:</u> ID No. IS-21 4,000 gallon No. 2 oil storage tank ID No. IS-22 Emergency propane generator – 17kW ID No. IS-23 Propane storage tank ID No. IS-24 Emergency propane generator – 19kW ID No. IS-25 Propane storage tank
Part I		
Cover	-	Amended permit numbers and dates.
3	Part I, table of permitted emission sources	Changed ID Nos. for the four combustion turbines to match ESM.
5	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.
		Removed “State-only” from regulation 2D .0606 for excess emissions/good operations and maintenance practices (making it both a State and Federal requirement) and removed the Federal-only 40 CFR 52 Subpart II (Federal-only requirement) regulation since 2D .0606 is federally approved.
		Added 2D .0614 CAM.
7	Part I, Section 2.1 A.3 (old sections 2.1 A.3 and 4)	Replaced Federal-only 40 CFR 52 Subpart II and State-only 2D .0521 visible emission Sections 2.1 A.3 and 4 with new approved SIP 2D .0521 visible emission Section 2.1 A.3.
9-10	Part I, Section 2.1 A.7 (old sections 2.1 A.8 and 9)	Removed “State-only” heading from 2D .0606 in old section 2.1 A.8 (making it both a State and Federal requirement) and removed the old Federal-only section 2.1 A.9 since 2D .0606 is federally approved.
10	Part I, Section 2.1 A.8	Revised recycled fuel oil condition.
12-13	Part I, Section 2.1 A.12	Removed NOx allocations for years 2004 and 2005.
13	Part I, Section 2.1 A.12.e	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.
13-14	Part I, Section 2.1 A.13	Added 2D .0614 CAM requirements.
14	Part I, Section 2.1 B 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.
14-15	Part I, Section 2.1 B.2 (old sections 2.1 B.2 and 3)	Replaced Federal-only 40 CFR 52 Subpart II and State-only 2D .0521 visible emission Sections 2.1 B.2 and 3 with new approved SIP 2D .0521 visible emission Section 2.1 B.2.
15	Part I, Section 2.1 B.3.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.
22-29	Part I, Section 3	Added new set of general conditions.

List of Insignificant Activities under 2Q .0503(8)

Emission Source I.D.	Emission Source Description
IS-1	No. 2 fuel oil tank - 500,000 gallons
IS-2	No. 2 fuel oil tank - 250,000 gallons
IS-3	Boiler light off - No. 2 fuel oil tank 15,000 gallons
IS-4	Unit 1 lube oil tank - 6,000 gallons
IS-5	Unit 2 lube oil tank - 3,000 gallons
IS-6	Unit 2 lube oil tank - 8,000 gallons
IS-7	Unit 1 & 2 lube oil reservoirs - 2,150 gallons each
IS-8	Unit 3 lube oil reservoir - 3,160 gallons
IS-9	Used oil skimmers - 1000 gallons each
IS-10	Gasoline tank - 2,000 gallons
IS-11	Kerosene tank - 500 gallons
IS-12	Caustic & H ₂ SO ₄ tanks, 4,000 gallons each
IS-13	Used oil burn tank - 550 gallon
IS-14	Hydrazine tank - 190 gallon
IS-15	Fugitive emissions from ash handling
IS-16	Fugitive emissions from coal handling/storage
IS-17	340 hp emergency diesel fire pump engine
IS-18	40 kW diesel fired emergency generator
IS-19	Coal handling and transfer operations
IS-20	Coal storage piles
IS-21	4,000 gallon No. 2 oil storage tank
IS-22	Emergency propane generator – 17kW
IS-23	Propane storage tank
IS-24	Emergency propane generator – 19kW
IS-25	Propane storage tank

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*
06094T14	06094T13	DRAFT	

* Effective 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 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, 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: **Carolina Power and Light Company
d/b/a Progress Energy Carolinas, Inc.**

Facility ID: **780147 (W. H. Weatherspoon Steam Electric Plant)**

Facility Site Location: **491 Power Plant Road**
City, County, State, Zip: **Lumberton, Robeson County, NC, 28358**

Mailing Address: **491 Power Plant Road**
City, State, Zip: **Lumberton, NC, 28358**

Application Number: **7800147.05A**
Complete Application Date: **January 26, 2005**

Primary SIC Code: **4911**
Division of Air Quality, **Fayetteville Regional Office**
Regional Office Address: **225 Green Street, Suite 714**
Fayetteville, NC 28301

Permit issued this the ____ day of ____, 2007

Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section
By Authority of the Environmental Management Commission

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- Phase II NO_x Averaging Plan dated June 29, 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.

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
Unit 1 Boiler	one coal/on-specification No. 2 fuel oil/No. 2 fuel oil/natural gas*-fired electric utility boiler (655 million Btu per hour nominally rated heat input) equipped with a low-NOx burner system*	Unit 1 ESP	one cold-side electrostatic precipitator (Buell model) equipped with a sulfur trioxide flue gas conditioning system*
Unit 2 Boiler	one coal/on-specification No. 2 fuel oil/No. 2 fuel oil/natural gas*-fired electric utility boiler (668 million Btu per hour nominally rated heat input) equipped with a low-NOx burner system*	Unit 2 ESP	one cold-side electrostatic precipitator (Buell model) equipped with a sulfur trioxide flue gas conditioning system*
Unit 3 Boiler	one coal/on-specification No. 2 fuel oil/No. 2 fuel oil/natural gas*/pelletized paper and/or cardboard fuel-fired electric utility boiler (991 million Btu per hour nominally rated heat input) equipped with a low-NOx burner system*	Unit 3 ESP	one cold-side electrostatic precipitator (Research-Cottrell model) equipped with a sulfur trioxide flue gas conditioning system**
ES-IC1 ES-IC2 ES-IC3 ES-IC4	four simple-cycle natural gas/No. 2 fuel oil-fired combustion turbines (573 million Btu per hour nominally rated heat input each)	NA	NA

* may be constructed in future (see Part II)

** operated on an as-needed basis

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. two coal/on-specification No. 2 fuel oil/No. 2 fuel oil/natural gas-fired electric utility boilers (ID Nos. Unit 1 Boiler and Unit 2 Boiler) and associated electrostatic precipitators (ID Nos. Unit 1 ESP and Unit 2 ESP)

one coal/on-specification No. 2 fuel oil/No. 2 fuel oil/natural gas/pelletized paper and/or cardboard fuel-fired electric utility boiler (ID No. Unit 3 Boiler) and associated electrostatic precipitator (ID Nos. Unit 3 ESP)

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
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 2Q .0402 (40 CFR Part 72)
nitrogen oxides	when burning only coal 1.8 pounds per million Btu heat input	15A NCAC 2D .0519
	when burning only oil or natural gas 0.8 pounds per million Btu heat input	
	when burning both coal and oil or natural gas $E = [(Ec)(Qc) + (Eo)(Qo)]/Qt$ where: E = emission limit for combined burning of coal and oil or gas in pounds per million Btu heat input Ec = 1.8 pounds per million Btu heat input for coal only Eo = 0.8 pounds per million Btu heat input for used oil or gas only Qc = coal heat input in Btu per hour Qo = oil and gas heat input in Btu per hour Qt = Qc + Qo	
	as defined in specific conditions	15A NCAC 2D .1416
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 2Q .0402 (40 CFR Part 72)

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	40 percent opacity when averaged over a six-minute period except that: (i) no more than four six-minute periods shall exceed the opacity standard in any one day; and (ii) the percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained. Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs (i) and (ii) above, if the excess emissions are exempted according to the procedures set out in 2D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in paragraphs (i) and (ii) above, if the excess emissions are exempted according to the procedures set out in 2D .0535(c)	15A NCAC 2D .0521
	State-enforceable only Boiler 1 - 8 percent annual average opacity Boiler 2 - 10 percent annual average opacity Boiler 3 - 23 percent annual average opacity	15A NCAC 2D .0536
particulate matter	Boiler 1 - 0.14 pounds per million Btu heat input Boiler 2 - 0.14 pounds per million Btu heat input Boiler 3 - 0.15 pounds per million Btu heat input	15A NCAC 2D .0536
malfunction abatement plan	as defined in specific conditions	15A NCAC 2D .0535
good operations and maintenance practices	as defined in specific conditions	15A NCAC 2D .0606
toxic air pollutants	as defined in Section 2.2, State-only Requirement	15A NCAC 2D .1100
particulate matter	monitoring for ESP control device	15A NCAC 2D .0614 CAM (40 CFR 64)

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

- a. Emissions of sulfur dioxide from these sources 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 .0501(e), 2D .0516 and 2D .0608]

Testing [15A NCAC 2D .0501(c)(4)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and 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 2D .0516.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f) and 2D .0608]

- c. The Permittee shall assure compliance with 15A NCAC 2D .0501(e) and 2D .0516 by determining sulfur dioxide emissions in pounds per million Btu using a continuous emissions monitoring (CEM) system meeting the requirements of 40 CFR Part 75 except that unbiased values may be used (missing data shall be

filled in accordance with 40 CFR Part 75). Compliance with sulfur dioxide emission standards shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If the CEM system is not operated as required above or any 24-hour block average exceeds 2.3 pounds per million Btu heat input, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- d. The Permittee shall submit the continuous emissions monitoring data showing the 24-hour daily block values in pounds per million Btu for each 24-hour daily block averaging period during the reporting period no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.
- e. **CEMs Monitor Availability** - The Permittee shall submit sulfur dioxide CEM systems monitor downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, no later than 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.

2. 15A NCAC 2D .0519: CONTROL OF NITROGEN OXIDES EMISSIONS

- a. Emissions of nitrogen oxides from these sources when burning coal and/or oil shall be calculated by the following equation [15A NCAC 2D .0519]:

$$E = [(Ec)(Qc) + (Eo)(Qo)]/Qt$$

- where: E = emission limit for combined burning of coal and oil in **pounds per million Btu heat input**
Ec = 1.8 pounds per million Btu heat input for coal only
Eo = 0.8 pounds per million Btu heat input for oil or gas only
Qc = coal heat input in Btu per hour
Qo = oil or gas heat input in Btu per hour
Qt = Qc + Qo

Testing [15A NCAC 2D .0501(c)(7)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(7) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0519.

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

The Permittee shall assure compliance with 15A NCAC 2D .0519 by determining nitrogen oxide emissions in pounds per million Btu using a continuous emissions monitoring (CEM) system meeting the requirements of 40 CFR Part 75 except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with this emission standard shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75.

For monitoring purposes, the following emission limits will apply:

- i. When only coal is burned, the emission limit shall be **1.8 pounds per million Btu heat input**.

- ii. When only oil is burned, the emission limit shall be **0.8 pounds per million Btu heat input**.
- iii. When oil is burned other than for startup and for periods greater than 24 hours, the emission limit shall be calculated in accordance with the equation in Section 2.1 A.2 a above.

If the CEM system is not operated as required above or if any 24-hour block average exceeds the emission limit, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0519.

- d. The Permittee shall maintain records of monthly coal and oil consumption (written or electronic form) and shall submit such records within 30 days of a request by DAQ.
- e. **Reporting** [15A NCAC 2Q .0508(f)]
The Permittee shall submit the continuous emissions monitoring system data showing the 24-hour daily block values for periods of **excess nitrogen oxide emissions** no later than 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.
- f. **CEMs Monitor Availability** - The Permittee shall submit the nitrogen oxide CEM systems monitor downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, no later than 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.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the boilers (ID Nos. Unit 1 Boiler, Unit 2 Boiler, and Unit 3 Boiler) shall not be more than **40 percent opacity** when averaged over a six-minute period. [15A NCAC 2D .0521(c)]
- b. For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance with the 40 percent opacity limit shall be determined as follows:[15A NCAC 2D .0521(g)]
 - i. No more than four six-minute periods shall exceed the opacity standard in any one day; and
 - ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 2D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in paragraphs b.i. and b.ii. above, if the excess emissions are exempted according to the procedures set out in 2D .0535(c).

All periods of excess emissions shall be included in the determinations in paragraphs b.i. and b.ii above until such time that the excess emissions are exempted according to the procedures in 2D .0535.

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

- c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. Opacity shall be measured using an opacity monitoring system that meets the performance specifications of Appendix B of 40 CFR Part 60. The opacity monitoring system shall be subjected to a quality assurance program approved by the Director. The Permittee, for each unit subject to 2D .0521(g) shall have on file with the Director an approved quality assurance program, and shall submit to the Director within the time period of his request for his approval a revised quality assurance program, including at least procedures and frequencies for calibration, standards traceability, operational checks, maintenance, auditing, data validation, and a schedule for implementing the quality assurance program.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given above, or if the records are not maintained.

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

- e. The Permittee shall submit the COMS data in accordance with the reporting requirements given in Section 2.1 A.7.c. All instances of excess emissions must be clearly identified.

4. 15A NCAC 2D .0536: PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS

- a. Particulate emissions from the utility boilers shall not exceed the following: [15A NCAC 2D .0536(b)]

Boiler 1 - 0.14 pounds per million Btu heat input
Boiler 2 - 0.14 pounds per million Btu heat input
Boiler 3 - 0.15 pounds per million Btu heat input

Testing [15A NCAC 2D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0536.

Monitoring [15A NCAC 2D .0536]

- c. A stack test shall be conducted in accordance with Method 5 or Method 17 of Appendix A of 40 CFR Part 60 once per calendar year. In the event that a unit exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within 6 months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests. If the Permittee fails to complete a required stack test, or if the result of any test is greater than the limits given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0536.

Reporting [15A NCAC 2D .0536]

- d. The results of any stack test shall be reported within 30 days, and the test report shall be submitted within 60 days after the test.

5. STATE-ONLY REQUIREMENT FOR ANNUAL AVERAGE OPACITY:

- a. Visible emissions from the utility boiler units shall not exceed the following: [15A NCAC 2D .0536(b)]

Boiler 1 - 8 percent annual average opacity
Boiler 2 - 10 percent annual average opacity
Boiler 3 - 23 percent annual average opacity

The average is the sum of the measured non-overlapping six-minute averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping six-minute averages. Start-up, shut-down, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included.

Recordkeeping/Reporting [15A NCAC 2D .0536]

- b. The Permittee shall submit a report by the 30th day following the end of each month showing, for each day of the previous month, the calculated annual average opacity of each unit and the annual average opacity limit.

6. 15A NCAC 2D .0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

- a. All electric utility boiler units shall have a malfunction abatement plan approved by the Director as specified in 15A NCAC 2D .0535(d). [15A NCAC 2D .0535]

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

- b. The Permittee shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs (written or electronic form) shall be subject to inspection by DAQ personnel upon request during business hours.

7. 15A NCAC 2D .0606 SOURCES COVERED BY APPENDIX P OF 40 CFR PART 51 (CONTINUOUS OPACITY MONITORING AND EXCESS EMISSIONS)

- a. The electrostatic precipitator high voltage control Energy Management System (EMS) feature shall only be operated in the Dynamic Mode. Operation of the EMS in any other mode requires a revision to this permit.

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

- b. The Permittee shall use a continuous opacity monitoring system (COMS) to monitor and record opacity. Continuous emissions monitoring and recordkeeping of opacity shall be performed as described in Paragraphs 2 and 3.1.1 through 3.1.5 of Appendix P of 40 CFR Part 51. The monitoring systems shall meet the minimum specifications described in Paragraphs 3.3 through 3.8 of Appendix P of 40 CFR Part 51.
- c. The quarterly excess emissions (EE) reports required under Appendix P of 40 CFR Part 51 shall be used as an indication of good operation and maintenance of the electrostatic precipitators. These sources shall be deemed to be properly operated and maintained if the percentage of time the opacity emissions, calculated on a 6-minute average, in excess of **40 percent** (including startups, shutdowns, and malfunctions) does not exceed 3.0 percent of the total operating time for any given calendar quarter, adjusted for monitor downtime (MD) as calculated below. In addition, these sources shall be deemed to be properly operated and maintained if the %MD does not exceed 2.0 percent.

Calculations for %EE and %MD

Percent Excess Opacity Emission (%EE) Calculation:

$$\%EE = \frac{\text{Total Excess Emission Time}^*}{\text{Total Source Operating Time}^{***} - \text{Monitor Downtime}} \times 100$$

Percent Monitor Downtime (%MD) Calculation for COMS:

$$\%MD = \frac{\text{Total Monitor Downtime}^{**}}{\text{Total Source Operating Time}^{***}} \times 100$$

* Total Excess Emission Time contains any 6-minute period greater than 40% opacity including startup, shutdown, and malfunction.

** Total Monitor Downtime includes Quality Assurance (QA) activities unless exempted by regulation or defined in an agency approved QA Manual. The amount of exempt QA Time will be reported in the quarterly report as such.

*** If a source operates less than 2200 hours during any quarter, the source may calculate the %EE and/or %MD using all operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained. [N.C.G.S. 143-215.110]

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

- d. The Permittee shall submit the excess emissions and monitor downtime reports as required under Appendix P of 40 CFR Part 51 no later than 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. For periods of excess emissions, defined as each six-minute period average greater than **40 percent opacity**, the opacity measurements recorded by the COMS shall be reported as described in Paragraphs 4 and 5.1 of Appendix P of 40 CFR Part 51 except that a six-minute time period shall be deemed as an appropriate alternative opacity averaging period as described in Paragraph 4.2 of Appendix P

of 40 CFR Part 51. A minimum of 36 data points, equally spaced, is required to determine a valid six-minute value. All instances of deviations from the requirements of this permit must be clearly identified.

STATE ENFORCEABLE ONLY

8. 15A NCAC 2Q.0317: AVOIDANCE CONDITIONS for SECTION 15A NCAC 2Q.0700: TOXIC AIR POLLUTANTS PROCEDURES

- a. **VENDOR SUPPLIED RECYCLED No. 2 FUEL OIL REQUIREMENTS** - In accordance with Rule 2Q .0317, the Permittee is avoiding the applicability of Rule 2Q .0700 by using recycled fuels which are equivalent to their virgin counterparts. The Permittee is allowed to use the recycled fuel oil(s) supplied by a DAQ-approved vendor as follows: [15A NCAC 2Q .0702]

Specifications - The recycled fuel oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1.0 ppm maximum
Cadmium	2.0 ppm maximum
Chromium	5.0 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100°F minimum
Sulfur	0.5% maximum (by weight)
Ash	1.0% maximum

- b. **Testing** [15A NCAC 2D .0605]

The DAQ reserves the right to require additional testing and/or monitoring of the recycled fuel oil(s) on an annual basis or without notice.

Monitoring/Recordkeeping [15A NCAC 2D .0605]

- c. The Permittee is responsible for ensuring that the recycled fuel oil(s), as received at the site, meet(s) the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the fuel oil(s).
- d. The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
 - i. The actual amount of recycled fuel oil(s) delivered to, and combusted at the facility on an annual basis.
 - ii. Each load of recycled fuel oil received shall include the following:
 - A. A delivery manifest document clearly showing the shipment content and amount, its place and date of loading, and place and date of destination;
 - B. A batch specific analytical report that contains an analysis for all constituents/properties listed above. Analytical results of the samples representative of the recycled oil shipment from the vendor shall be no more than one year old when received;
 - C. Batch signature information consisting of the following: a batch number, tank identification with batch volume of recycled oil, date and time the batch completed treatment, and volume(s) delivered; and
 - D. A certification indicating that the recycled fuel oil does not contain detectable PCBs (< 2 ppm).

Reporting [15A NCAC 2D .0605]

- e. Within 30 days after each calendar year, regardless of the amount received or combusted, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the following:
 - i. A summary of the results of the analytical testing for the previous 12 months; and
 - ii. The total gallons of recycled fuel oil(s) from each approved vendor and combusted at the facility for the previous 12 months.

STATE-ONLY REQUIREMENT:

9. 15A NCAC 2Q .0700 TOXIC AIR POLLUTANT PROCEDURES

- a. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn as supplemental fuel only in Boiler Unit No. 1, the following:
 - i. oils, either petroleum-derived or synthetic, used as a lubricant, hydraulic fluid, metal working fluid, and insulating fluid or coolant, and
 - ii. solvents, including acetone, methanol, methyl ethyl ketone, toluene, Varsol™, xylene and waste solvent mixtures containing less than 10 percent (by volume) of any halogenated solvent not listed above as referenced by 40 CFR 261.31.
- b. The burning of any of the above materials as supplemental fuels is limited to the following conditions and stipulations:
 - i. total halogen content shall not exceed 1,000 micrograms per gram (parts per million),
 - ii. total lead content shall not exceed 250 micrograms per gram (parts per million),
 - iii. total PCB content of any insulating fluid or coolant shall not exceed 49 parts per million,
 - iv. supplemental fuels shall not be burned during periods of start-up, shutdown or malfunctions,
 - v. total supplemental fuel feed rates shall not exceed 300 gallons per hour, and 10,000 gallons per calendar year, and
 - vi. supplemental fuels shall be limited to used oils and solvents generated at this facility.

Monitoring/Recordkeeping

- c. A daily record of the quantity of supplemental fuels burned in the boiler shall be maintained on file for a minimum of two years and be available for inspection by DAQ personnel upon request.
- d. Chemical analyses shall be conducted on each batch of all supplemental fuels burned at this facility. The results of these analyses shall be maintained on file for a minimum of two years and be available for inspection by DAQ personnel upon request.

STATE-ONLY REQUIREMENT:

10. 15A NCAC 2D .1100 TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENTS

- a. The Permittee, subject to the conditions and stipulations stated herein, is allowed to co-fire pelletized paper and/or cardboard fuel mixed with coal in Boiler Unit No. 3 in accordance with the emission limits as specified in Section 2.2 of this Permit.
- b. The maximum firing rate of the pelletized paper fuel shall not exceed 9 tons per hour or 108 tons per day.
- c. The pelletized paper and cardboard fuel shall be limited to waste pelletized paper and cardboard generated from non-industrial sources.
- d. The pelletized paper and cardboard fuel shall be combusted in the boiler operating under conditions of high fire producing steam demand.

Recordkeeping

- e. The Permittee shall maintain records of the pelletized paper and cardboard fuel combustion activities in a logbook for a minimum of two years. The logbook (in written or electronic format) shall be kept on-site, made available to DAQ personnel upon request, and shall include:
 - i. the date of pelletized paper fuel combustion,
 - ii. the source of the pelletized paper fuel,
 - iii. the heating value of the pelletized paper fuel,
 - iv. the quantity of pelletized paper fuel combusted,
 - v. the feed rate of pelletized paper fuel to the boiler, and
 - vi. the feed rate of coal to the boiler.

Reporting

- f. Within 30 days after initial use of the pelletized paper fuel, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the date on which the material was first combusted in the boiler.

STATE-ONLY REQUIREMENT:

11. 15A NCAC 2Q .0700 TOXIC AIR POLLUTANT PROCEDURES

- a. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn waste ammonia/citric acid boiler cleaning solution in the electric utility boilers (ID Unit Nos. 1, 2, and 3).
- b. The maximum firing rate of the waste ammonia/citric acid boiler cleaning solution shall not exceed:

Unit	Maximum Injection Rate
Boiler (ID Unit No. 1)	46 gallons per minute
Boiler (ID Unit No. 2)	46 gallons per minute
Boiler (ID Unit No. 3)	60 gallons per minute

Recordkeeping

- c. The total amount of waste boiler cleaning solution injected must be recorded on a daily basis and the records kept on file for a minimum of two years.

Reporting

- d. The Permittee shall notify the Regional Supervisor, DAQ, at least five days prior to waste boiler cleaning solution burning.

12. 15A NCAC 2D .1416: EMISSIONS ALLOCATIONS FOR UTILITY COMPANIES

- a. The total NO_x emissions from all the coal-fired boilers and combustion turbines that are not listed in 15A NCAC 2D .1417 at Progress Energy Carolinas' Inc. (Carolina Power & Light Company) Asheville, Cape Fear, Lee, Mayo, Roxboro, Sutton, and Weatherspoon facilities shall not exceed 11,320 tons per ozone season for 2006 and each year thereafter until revised according to 15A NCAC 2D .1420. [15A NCAC 2D .1416(b)]
- b. Furthermore, except as allowed under Section 2.1 A.12.c 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 .1416(b)]

SOURCE	NO _x EMISSION ALLOCATIONS (tons/season)
	2006 and later
1 (Unit 1 Boiler)	80
2 (Unit 2 Boiler)	91
3 (Unit 3 Boiler)	170

- c. Sources (ID Nos. Unit 1 Boiler, Unit 2 Boiler, and Unit 3 Boiler) may comply with the requirements of 15A NCAC 2D .1416 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 .1416(d) and 15A NCAC 2D .1419 (b)(2)]

- d. **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 .1416 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 .1416.

- e. **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.

13. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING (40 CFR 64)

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f) and 15A NCAC 2D .0614]

- a. To provide a reasonable assurance of compliance with the particulate matter limit of:

Unit 1 Boiler - 0.14 pounds per million Btu heat input
Unit 2 Boiler - 0.14 pounds per million Btu heat input
Unit 3 Boiler - 0.15 pounds per million Btu heat input

for the ESP control devices on these sources, the Permittee shall determine and record opacity using a continuous opacity monitoring system (COMS) meeting the requirements of Appendix B of 40 CFR Part 60. Any three-hour block average opacity value in excess of the following indicator ranges shall be deemed an excursion as defined in 40 CFR Part 64:

Unit 1 Boiler - 16 percent
Unit 2 Boiler - 17 percent
Unit 3 Boiler - 21 percent

The appropriate averaging period for which an excursion shall be determined is each 3-hour block average of six-minute opacity averages beginning at midnight (total of eight 3-hour block periods each day). Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for data averages and calculations.

For any excursion, the Permittee shall initiate an inspection of the control equipment and/or the COMS and initiate the necessary repairs. In addition to implementing procedures outlined in the malfunction abatement plan, as required in Section 2.1 A.6, the following corrective actions shall be taken as soon as practical:

- i. Control operator shall notify the shift supervisor or responsible official (plant manager or representative) in accordance with plant procedures.
- ii. System dispatcher shall be alerted if load reductions are anticipated.
- iii. The following operating practices and procedures shall be initiated as necessary:
 - Identify cause of excursion
 - Isolate ESP field or increase power input to other fields if necessary
 - Reduce load, as necessary, to help minimize emissions
 - Proceed to shutdown or confirm malfunction conditions exist if emissions cannot be controlled appropriately
 - Initiate work order for ESP inspection and repair as needed
- iv. Nature and cause of excursion shall be documented in operations log.
- v. Provide notification to DAQ as necessary.

If 5.0 percent or greater of the three-hour block averaged COMS data (excluding startup, shutdown, and malfunction periods) recorded in a calendar quarter exceeds the opacity value, the Permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standards above. In the event that a unit exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within 6 months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests. If a source operates less than 2200 hours during any quarter, the source may evaluate three-hour opacity values using operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained. If opacity is not determined and recorded, the

Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614. If the result of any stack test is greater than the particulate standard above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0536.

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

- b. The results of any stack test shall be reported within 30 days, and the test report shall be submitted within 60 days after the test. In addition, the Permittee shall submit the following reports as required under §64.9 of 40 CFR Part 64 no later than 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. Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; and
 - ii. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

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

B. four simple-cycle natural gas/No. 2 fuel oil-fired combustion turbines (ID Nos. IC-1, IC-2, IC-3 and IC-4)

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	40 percent opacity (except during startup, shutdowns, and malfunctions approved as such according to procedures approved under 15A NCAC 2D .0535) when averaged over a six-minute period except that six-minute periods averaging not more than 90 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
nitrogen oxides	as defined in specific conditions	15A NCAC 2D .1416 and 15A NCAC 2D .1417

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

- a. Emissions of sulfur dioxide from these sources 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]
- b. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil or natural gas in these sources.

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

- a. Visible emissions from this source shall not be more than **40 percent opacity** (except during startup, shutdowns, and malfunctions approved as such according to procedures approved under 15A NCAC 2D .0535) when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 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 90 percent opacity. [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 General Condition JJ.

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

- c. To assure compliance, the Permittee shall perform a Method 9 test for 1 hour in accordance with 15A NCAC 2D .0501(c)(8) prior to exceeding 1000 hours of operation on No. 2 fuel oil. This monitoring protocol shall be repeated prior to each 1000-hour period of operation on No. 2 fuel oil. No monitoring is required while burning natural gas in this source. If the Permittee fails to conduct the required monitoring, or if the results of this test are above the limit given in Section 2.1B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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 Method 9 observation; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

**3. 15A NCAC 2D .1416: EMISSIONS ALLOCATIONS FOR UTILITY COMPANIES and
15A NCAC 2D .1417: EMISSION ALLOCATIONS FOR LARGE COMBUSTION SOURCES**

- a. The total NOx emissions from all the coal-fired boilers and combustion turbines that are not listed in 15A NCAC 2D .1417 at Progress Energy Carolinas' Inc. (Carolina Power & Light Company) Asheville, Cape Fear, Lee, Mayo, Roxboro, Sutton, and Weatherspoon facilities shall not exceed 11,320 tons per ozone season for 2006 and each year thereafter until revised according to 15A NCAC 2D .1420. [15A NCAC 2D .1416(b)]
- b. Sources (ID Nos. IC-1, IC-2, IC-3 and IC-4) may comply with the requirements of 15A NCAC 2D .1416 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)]

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

- c. The Permittee shall assure compliance with 15A NCAC 2D .1416 by determining nitrogen oxide emissions in tons per year 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 also comply with 40 CFR 96, Budget Trading Program for State Implementation Plans, for recordkeeping and reporting requirements. All instances of deviations from the requirements of this permit must be clearly identified. If the nitrogen oxides emissions for any ozone season exceed the applicable emission allocations indicated above or the recordkeeping requirements are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1416.
- 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.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

STATE- ONLY REQUIREMENT:

TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT - Pursuant to 15A NCAC 2D .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:

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
Boiler (ID Unit No. 1)	arsenic	254 pounds/year
	cadmium	2,716 pounds/year
	chromium VI	2.34 pounds/year
	mercury	39.1 pounds/day
	nickel	161 pounds/day
	hydrochloric acid	872.6 pounds/hour
	dioxin	0.116 pounds/year
Boiler (ID Unit No. 2)	arsenic	274 pounds/year
	cadmium	2,803 pounds/year
	chromium VI	2.45 pounds/year
	mercury	39.8 pounds/day
	nickel	171 pounds/day
	hydrochloric acid	891 pounds/hour
	dioxin	0.116 pounds/year
Boiler (ID Unit No. 3)	arsenic	700.8 pounds/year
	cadmium	17,082 pounds/year
	chromium VI	350.4 pounds/year
	mercury	408 pounds/day
	nickel	3,638.4 pounds/day
	hydrochloric acid	1,993 pounds/hour
	dioxin	13.31 pounds/year
IC Turbine 1	arsenic	49.9 pounds/year
	cadmium	14,191 pounds/year
	chromium VI	82.2 pounds/year
	mercury	3.84 pounds/day
	nickel	1978 pounds/day

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
	hydrochloric acid	20.4 pounds/hour
IC Turbine 2	arsenic	49.9 pounds/year
	cadmium	14,191 pounds/year
	chromium VI	82.2 pounds/year
	mercury	3.84 pounds/day
	nickel	1978 pounds/day
	hydrochloric acid	20.4 pounds/hour
IC Turbine 3	arsenic	49.9 pounds/year
	cadmium	14,191 pounds/year
	chromium VI	82.2 pounds/year
	mercury	3.84 pounds/day
	nickel	1978 pounds/day
	hydrochloric acid	20.4 pounds/hour
IC Turbine 4	arsenic	49.9 pounds/year
	cadmium	14,191 pounds/year
	chromium VI	82.2 pounds/year
	mercury	3.84 pounds/day
	nickel	1978 pounds/day
	hydrochloric acid	20.4 pounds/hour

2.3- Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirements as of the date of issuance of this permit based on information furnished with all previous applications. This shield does not apply to future modifications or changes in the method of operation: [15A NCAC 2Q .0512(a)(1)(B)]

- A. 15A NCAC 2D .0515, Particulates From Miscellaneous Industrial Processes, is not applicable to the coal/ash handling system because there are no point sources of emissions.
- B. 15A NCAC 2D .0537, Control of Mercury Emissions, is not applicable to the boilers or turbines because it does not apply to fuel combustion sources.
- C. 15A NCAC 2D .0521, Control of Visible Emissions, is not applicable to the coal/ash handling because there are no point sources of emissions.

2.4- Phase II Acid Rain Permit Requirements

ORIS code: 2723
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. SO₂ Allowance Allocations and NO_x Requirements for each affected unit

		2005	2006	2007	2008	2009
Boiler ID No. 1	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	1122*	1122*	1122*	1122*	1122*
	NO _x limit	<p>Pursuant to 40 CFR 76.11, the Division of Air Quality approves a NO_x emissions averaging plan for this unit, effective from calendar years 2005 through 2009.</p> <p>Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for a year under the plan and if this unit fails to meet the annual average alternative contemporaneous emission limitation of 0.93 lb/mmBtu or has an annual heat input greater than 3,124,890 mmBtu, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the South Carolina DHEC, Western North Carolina Regional Air Quality Agency and Florida Department of Environmental Protection has also approved this averaging plan.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

* The number of allowances allocated to Phase II-affected units by U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

		2005	2006	2007	2008	2009
Boiler ID No. 2	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	1125*	1125*	1125*	1125*	1125*
	NO _x limit	<p>Pursuant to 40 CFR 76.11, the Division of Air Quality approves a NO_x emissions averaging plan for this unit, effective from calendar years 2005 through 2009.</p> <p>Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for a year under the plan and if this unit fails to meet the annual average alternative contemporaneous emission limitation of 0.93 lb/mmBtu or has an annual heat input greater than 3,070,584 mmBtu, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the South Carolina DHEC, Western North Carolina Regional Air Quality Agency and Florida Department of Environmental Protection has also approved this averaging plan.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

* The number of allowances allocated to Phase II-affected units by U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

		2005	2006	2007	2008	2009
Boiler ID No. 3	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	1626*	1626*	1626*	1626*	1626*
	NO _x limit	<p>Pursuant to 40 CFR 76.11, the Division of Air Quality approves a NO_x emissions averaging plan for this unit, effective from calendar years 2005 through 2009.</p> <p>Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for a year under the plan and if this unit fails to meet the annual average alternative contemporaneous emission limitation of 0.55 lb/mmBtu or has an annual heat input greater than 5,550,670 mmBtu, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the South Carolina DHEC, Western North Carolina Regional Air Quality Agency and Florida Department of Environmental Protection has also approved this averaging plan.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

* The number of allowances allocated to Phase II-affected units by U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

C. Permit Applications (attached)

The permit applications 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 applications:

- Acid Rain Permit Application dated June 29, 2004
- Phase II NO_x Compliance Plan dated June 29, 2004
- Phase II NO_x Averaging Plan dated June 29, 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)(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 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)(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 2Q .0507(e) and 2Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NO_x budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

E. Duty to Comply [15A NCAC 2Q .0508(i)(2)]

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. **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 in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.
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 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.

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 quarterly. 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.B. Other Requirements under 15A NCAC 2D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .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 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 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 .0508(e) and 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(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 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) and 2Q .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 2Q .0508(n)]

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 preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. 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; 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(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 2Q .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 2Q .0508(i)(10)]

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(i)(9)]

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(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. 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(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 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(i)(16)]

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.

PART II

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

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

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	
Unit 1 Boiler	natural gas cofiring system and low-NO _x burner system	NA	sulfur trioxide flue gas conditioning system
Unit 2 Boiler	natural gas cofiring system and low-NO _x burner system	NA	sulfur trioxide flue gas conditioning system
Unit 3 Boiler	natural gas cofiring system and low-NO _x burner system	NA	NA

* to be associated with both Unit 1 ESP and Unit 2 ESP.

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS:

The air emission source(s) and associated air pollution control device(s) and appurtenances listed in Section 1 are subject to the following specific terms, conditions, and limitations, including the monitoring, recordkeeping, and reporting requirements as specified herein:

1. Any air emission sources or control devices listed in Section 1 must be constructed and maintained in accordance with the provisions contained herein and constructed and operated in accordance with provisions contained in Part I of this Permit. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A NCAC, Subchapter 2D .0400, .0501, .0516, .0519, .0521, .0535, .0536, .0606, .0608, and .1100, and Subchapter 2Q .0402 (40 CFR Part 72) and .0507.
2. NOTIFICATION REQUIREMENT - This permit may be revoked unless the low NO_x burner systems on the Unit 1, Unit 2 and Unit 3 boilers; the flue gas conditioning systems on the Unit 1 and Unit 2 boilers and the natural gas cofiring systems on Unit 1, Unit 2 and Unit 3 boilers are constructed in accordance with the approval plans, specifications, and other supporting data. The operational dates are to be determined. The Permittee shall notify in writing the Regional Supervisor, DAQ, of the proposed operational date at least thirty days prior to construction. Within fifteen days after start-up of the new or modified facilities, the Permittee shall provide written notice of the start-up to the Regional Supervisor, DAQ. Any existing equipment being replaced is permitted to operate in compliance until the replacement equipment is operational.

SECTION 3: GENERAL CONDITIONS:

This section describes terms and conditions applicable to the construction of the air emission source(s) and associated air pollution control device(s) listed in Section 1. Unless otherwise specified herein all references to the "permit" in this section apply only to Part II of the permit.

A. Operating Conditions

All operating conditions for the air emission source(s) and associated air pollution control device(s) listed in Section 1 are under Part I of this permit.

B. General Provisions

1. This permit is nontransferable by the Permittee. Future owners and operators must obtain a new Air Quality Permit from the DAQ.
2. This issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of state law which have occurred prior to the issuance date of this permit.
3. A violation of any term or condition of Part II of this permit shall subject the Permittee to enforcement pursuant to NCGS 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.

C. **Submissions (reports, test data, monitoring data, notifications, and requests for renewal)**

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.

D. **Part II Renewal Request**

The Permittee shall request renewal of the emission source(s) and associated air pollution control device(s) listed in Section 1 at the same time as specified in Part I, Section 3 - General Condition K of this permit.

E. **Annual Fee Payment**

The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200 and in conjunction with Part I, Section 3 - General Condition W of this Air Quality Permit.

F. **Reporting Requirements**

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:

1. changes in the information submitted in the application;
2. changes that modify equipment or processes; or
3. 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.

G. **Termination, Modification, and Revocation of the Permit**

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; or
4. 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.

H. **Inspection and Entry**

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:

1. 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;
2. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
3. 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
4. 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.

I. **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.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound