



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

Beverly Eaves Perdue
Governor

B. Keith Overcash, P.E.
Director

Dee Freeman
Secretary

XX

Mr. Eric M. Northeim
Plant Manager
Mayo Electric Generating Plant
Progress Energy Carolinas, Inc.
10660 Boston Road
Roxboro, North Carolina 27574

Dear Mr. Northeim:

SUBJECT: Air Quality Permit No. 03478T32
Facility ID 7300045
Progress Energy Carolinas, Inc.
Mayo Electric Generating Plant
Roxboro, Person County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for renewal of a Title V permit received November 30, 2007, we are forwarding herewith Air Quality Permit No. 03478T32 to Progress Energy Carolinas, Inc., Mayo Electric Generating Plant, Roxboro, 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. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of

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
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Mr. Eric M. Northeim

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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 XX until XX, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

The changes made to the permit are summarized in the attachment to this letter. Should you have any questions concerning this matter, please contact please contact Mr. Michael Gordon, Environmental Engineer II, at (919) 715-6243.

Sincerely yours,

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

Enclosure

c: Gregg Worley, EPA Region 4
Raleigh Regional Office
Central Files

Air Quality Permit No. 03478T32
Progress Energy Carolinas, Inc.
Mayo Electric Generating Plant
Insignificant Activities under 15A NCAC 2Q .0503(8)

Emission Source I.D.	Emission Source Description	Regulatory Basis for Exemption
IS-1	No. 2 fuel oil tank, 340,000 gallons	2Q .0503(8)
IS-2.1, IS-2.2, IS-2.3, IS-2.4	Four Lube Oil Tanks; 1,150-17,000 gallons	2Q .0503(8)
IS-3	Emergency Diesel Generator Fuel Oil Storage Tank; 5000 gallons	2Q .0503(8)
IS-4	Gasoline Storage Tank; 1000 gallons	2Q .0503(8)
IS-5	Sulfuric Acid Tank; 10,000 gallons	2Q .0503(8)
IS-6	Emergency Fire Pump Reservoir; 220 gallons	2Q .0503(8)
IS-7	Emergency Fire Pump Day Tank; 290 gallons	2Q .0503(8)
IS-8	Oily Waste Separator Tank; 235 gallons	2Q .0503(8)
IS-9	Used Oil (waste separator) Storage Tank; 550 gallons	2Q .0503(8)
IS-10	Kerosene Tank, 3000 gallons	2Q .0503(8)
IS-11	Lube Oil Tank/Bowser; 1,150 gallons	2Q .0503(8)
IS-12	Main Turbine Lube Oil Reservoir; 14,000 gallons	2Q .0503(8)
IS-13	Fuel Handling Virgin No. 2 Fuel Oil Tank; 12,300 gallons	2Q .0503(8)
IS-14	Lube Oil Reservoirs 1A/1B BFP; 800 gallons	2Q .0503(8)
IS-15	Cooling towers that do not use chromated chemicals	2Q .0503(8)
IS-16	Emergency Diesel Generator Fuel Oil Day Tank; 275 gallons	2Q .0503(8)
IS-17	Liquid Caustic Tank; 10,000 gallons	2Q .0503(8)
IS-18	Liquid Alum Tank; 4500 gallons	2Q .0503(8)
IS-19	Fugitive emissions from coal handling/storage, plant parking lots, paved roads, unpaved roads, coal pile and ash handling	2Q .0503(8)
IS-20	Emergency Fire Pump No. 2 fuel oil-fired diesel engine; 393 hp	2Q .0503(8)
IS-21	Communications Emergency propane-fired generator; 41 hp	2Q .0503(8)
IS-22	Diesel Engine Powered Portable Welder (38 hp)	2Q .0503(8)
IS-23	Diesel Engine Powered Portable Air Compressor (52 hp)	2Q .0503(8)
IS-24	15 Portable Heaters (350,000 Btu/hr each)	2Q .0503(8)
IFAC	Fly Ash Carbon Treatment Operation (VOC emissions < 5 tons/year, HAP emissions < 1000 lbs/year)	2Q .0503(8)
INRE	Non-road Portable IC Engines (categorically insignificant, on-site for less than 12 months)	2Q .0503(7)(a)
IST1	No.2 fuel oil storage tank	2Q .0503(8)
IQWP	Emergency quench water pump; 175 hp NSPS SUBPART III and MACT SUBPART ZZZZ ¹	2Q .0503(8)
ILSRH	Limestone pile reclaim hopper	2Q .0503(8)
IG1A	Gypsum reversing conveyor	2Q .0503(8)
IG1B	Gypsum reversing conveyor	2Q .0503(8)
IG2	Gypsum conveyor from G1A/B to the stacking conveyor	2Q .0503(8)
IG3	Gypsum stacking conveyor	2Q .0503(8)
IGSP	Gypsum storage pile	2Q .0503(8)
IGTL	Gypsum truck load out	2Q .0503(8)

¹ No requirements under MACT Subpart ZZZZ apply as per §63.6590(c) except that the source must meet all applicable requirements in NSPS Subpart III in order to comply with this MACT Subpart.

ATTACHMENT
Air Quality Permit No. 03478T32
Progress Energy Carolinas, Inc.
Mayo Electric Generating Plant

The following changes were made to the Progress Energy Carolinas, Inc. – Mayo Plant Air Permit No. 03478T31:

Old Page No.	New Page No.	Part, Section, or Condition No.	Change
-	-	Cover	Amended to reflect current permit number, issue date, effective date, and associated application information
-	-	Table of Contents	Revised dates for Acid Rain Permit Application, Phase II NOx Compliance Plan, and Phase II NOx Averaging Plan attachments.
-	-	Emissions Source Table	Updated Table to reflect changes to permit
5-6	5-6	Table 2.1.A	Incorporated additional permit requirements
5-9	5-9	2.1.A	Removed references to .0501(c)2 and shielded the PM CEMS, dry ash handling, sorbent injection, etc.
5-9	5-9	2.1.A	Added NSPS 30 day testing notification requirement to several specific conditions in lieu of the existing 45 day requirement located in General Condition JJ
9	10	2.1.A.5	Removed NOx SIP requirements incorporated under 2D .2400. Requirements have been placed in the new Section 2.5 for CAIR
-	14	2.1.A.7	Incorporated applicable requirements of 15A NCAC 2D .2500 for Mercury emissions from Coal fired Boilers (Unit ID No.'s 1A and 1B)
27-28	30-31	2.4	Revised Acid Rain effective dates.
			Revised NOx limits and heat inputs in accordance with new averaging plan in Section 2.4 B.
			Revised dates for Acid Rain Permit Application, Phase II NOx Compliance Plan, and Phase II NOx Averaging Plan attachments in Section 2.4 D.
-	34-35	2.5	Added CAIR Permit Section and attached associated application as part of this permit

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*
03478T32	03478T31	XXXX	XXXX

* 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 (15A NCAC), 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: **7300045 (Mayo Electric Generating Plant)**

Facility Site Location: **10660 Boston Road**
City, County, State, Zip: **Roxboro, Person County, NC 27574**

Mailing Address: **10660 Boston Road**
City, State, Zip: **Roxboro, NC 27574**

Application Numbers: **7300045.07B, 7300045.08A, and 7300045.10A**
Complete Application Dates: **November 30, 2007, March 14, 2008, and February 18, 2010**

Primary SIC Code: **4911**
Division of Air Quality, **Raleigh Regional Office**
Regional Office Address: **3800 Barrett Drive**
Raleigh, NC 27609

Permit issued this the XX day of XXXXX

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

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(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 - Multiple Emission Source(s) Specific Limitations and Conditions
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
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SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

- List of Acronyms
- Acid Rain Permit Application dated May 5, 2009
- Phase II NOX Compliance Plan dated May 5, 2009
- Phase II NOX Averaging Plan dated May 5, 2009
- CAIR Permit Application received June 28, 2007

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Unit 1A Boiler NSPS PSD	Coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boiler (4,512.5 million Btu per hour nominally rated heat input each) equipped with low-NO _x burner systems and sodium coal conditioning	ESP1 ESP2 SCR1A ¹ SORB1A SCRUBBER ¹	Two electrostatic precipitators installed in parallel venting to a selective catalytic reduction system, sorbent injection system, and a common Flue Gas Desulfurization limestone slurry tray tower scrubber
Unit 1B Boiler NSPS PSD	Coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boiler (4,512.5 million Btu per hour nominally rated heat input each) equipped with low-NO _x burner systems and sodium coal conditioning	ESP3 ESP4 SCR1B ¹ SORB1B SCRUBBER ¹	Two electrostatic precipitators installed in parallel venting to a selective catalytic reduction system, sorbent injection system, and a common Flue Gas Desulfurization limestone slurry tray tower scrubber
Fly Ash Storage and Handling			
SILO1	Flyash storage silo (76,970 cubic feet capacity)	BF1	Bagfilter (3810 square feet of filter area)
PFTS1	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C1 BF4	Flyash deceleration cyclone followed by fabric filter (2.4:1 air-to-cloth ratio)
PFTS2	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C2 BF5	Flyash deceleration cyclone followed by fabric filter (2.4:1 air-to-cloth ratio)
ES-DFA Load ²	One dry flyash silo truck loadout	WS1	Wet flyash conditioner
Coal Storage and Handling			
SILO2- SILO6 NSPS	Five coal storage silos (1272 tons capacity each)	BF2	Bagfilter (2464 square feet of filter area)
CRUSHER NSPS	Coal crusher (3000 ton per hour nominal rated capacity) with conveyor drop points (ID Nos. CV2, CV9A and CV9B)	BF3	Bagfilter (3696 square feet of filter area)
COALDUMP NSPS	Coal unloading operation with wet suppression	N/A	N/A
CV2 and CV5 NSPS	Two coal conveyors (3000 tons per hour nominal rated capacity each)	N/A	N/A
CV6 NSPS	Coal conveyor (3000 tons per hour nominal rated capacity each)	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
CV9A, CV9B, CV10A and CV10B NSPS	Four coal conveyors (1500 tons per hour nominal rated capacity each)	N/A	N/A
CV12A, CV12B, CV13A and CV13B NSPS	Four coal conveyors (800 tons per hour nominal rated capacity each)	N/A	N/A
Limestone Receiving, Storage, Transfer, and Grinding			
LSRSP	Receiving and storage pile	N/A	N/A
LSL1 NSPS OOO	Reclaim hopper transfer and belt feeder L1	N/A	N/A
LSL2 NSPS OOO	Belt feeder L1 transfer and conveyor L2	N/A	N/A
LSL2HCG NSPS OOO	Head chute gate transfer housing for conveyor L2 transfer to conveyor L3	CDLSL2HCG	Fabric filter on transfer housing
LSL3 NSPS OOO	Conveyor L3	N/A	N/A
LSS1A NSPS OOO	Conveyor L3 transfer and storage silo 1A	CDLSS1A	Fabric filter (5:1 air-to-cloth ratio)
LSS1B NSPS OOO	Head chute gate transfer and storage silo 1B	CDLSS1A	Fabric filter (5:1 air-to-cloth ratio)
LSG1 NSPS OOO	Wet ball mill grinder in preparation building	N/A	N/A
LSG2 NSPS OOO	Wet ball mill grinder in preparation building	N/A	N/A
Miscellaneous			
WWTBR	Wastewater metals reduction bio-reactor	N/A	N/A
EMGEN MACT ZZZZ (No requirements)	No. 2 fuel oil-fired 750 kilowatt emergency diesel generator	N/A	N/A
SILO7	Sodium carbonate storage silo (1700 cubic feet capacity)	BF6	Bin vent filter (120 square feet of filter area)
ES-SORB1 and ES-SORB2	Two sorbent (lime or hydrated lime) silos (each 9,550 ft ³ capacity)	BF7 and BF8	Two bagfilters (Each 1.6:1 air-to-cloth ratio)
ES-SORB4 and ES-SORB5	Two sorbent pneumatic conveying equipment	N/A	None

1 Operated on an as needed basis for NOx and SO2 control.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. Two coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boilers equipped with low-NOX burner systems and sodium coal conditioning (ID Nos. Unit 1A Boiler and Unit 1B Boiler), four electrostatic precipitators (ID No. ESP1 through 4), two selective catalytic reduction systems (ID Nos. SCR1A and SCR1B), two sorbent injection systems (ID Nos. SORB1A and SORB1B), and a Flue Gas Desulfurization system (ID No. SCRUBBER)**

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	Varies - see Section 2.1 A.1.a	15A NCAC 2D .0524 (40 CFR Part 60 Subpart D)	
	Varies - see Section 2.1 A.2.a	15A NCAC 2D .0530 (PSD)	
	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 0.8 pounds per million Btu heat input		
	When burning both coal and oil 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 only Qc = coal heat input in Btu per hour Qo = oil heat input in Btu per hour Qt = Qc + Qo		
	Varies - see Section 2.1 A.1.a		15A NCAC 2D .0524 (40 CFR Part 60 Subpart D)
	Varies - see Section 2.1 A.2.a		15A NCAC 2D .0530 (PSD)
	Phase II Acid Rain Permit Requirements (see Section 2.4)		15A NCAC 2Q .0402 (40 CFR Part 72)
	Clean Air Interstate Rule Requirements (see Section 2.5)		15A NCAC 2D .2400 (40 CFR Part 96)
Particulate Matter	0.10 pounds per million Btu heat input	15A NCAC 2D .0524 (40 CFR Part 60 Subpart D)	
	0.10 pounds per million Btu heat input	15A NCAC 2D .0530 (PSD)	

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity (except during periods of startup, shutdown and malfunction) except for one six-minute period per hour of not more than 27 percent opacity	15A NCAC 2D .0524 (40 CFR Part 60 Subpart D)
Toxic Air Pollutants	See Section 2.1 A.5. State-only requirement	15A NCAC 2Q .0700
	See Section 2.1 A.6. State-only requirement	15A NCAC 2D .1100
	See Section 2.1 A.7. State-only requirement	15A NCAC 2D .2500

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

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

POLLUTANT	EMISSION LIMIT (Pounds per million Btu)
Sulfur Dioxide	$[y (0.80)+z(1.2)]/(y+z)$
Nitrogen Oxides (as NO ₂)	$[y (0.30)+z(0.70)]/(y+z)$
Where: y = percentage of total heat input derived from liquid fossil fuel z = percentage of total heat input derived from solid fossil fuel	
Particulates	0.10
Opacity	20 percent opacity (except during periods of startup, shutdown and malfunction) except for one six-minute period per hour of not more than 27 percent opacity

- c. Any use of the electrostatic precipitator high voltage control Energy Management System (EMS) feature requires a revision to this permit.

Testing [15A NCAC 2D .2601]

- d. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3 except that notification of testing shall be given 30 days prior to testing in accordance with 40 CFR 60 Subpart D. If the results of this test are above the limits given in Section 2.1 A.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.
- e. A stack test shall be conducted for particulate matter in accordance with Method 5B of Appendix A of 40 CFR Part 60 once per calendar year. In the event that a boiler 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 result of any test is greater than the limit given in Section 2.1 A.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- f. i. The Permittee shall either:
- (A) Install, maintain, and operate a COMS for measuring the opacity of emissions, or
 - (B) Install, maintain, and operate a PM CEMS.
- ii. The Permittee shall install, maintain, and operate a CEMS for measuring sulfur dioxide emissions, nitrogen oxide emissions, and either oxygen or carbon dioxide, as per the requirements of 40 CFR Part 75.
- g. Compliance with SO₂ and NO_x emission limits of Section 2.1 A.1.b above, shall be determined by averaging hourly continuous emission monitoring system values over any three-hour (rolling) period. The three-hour average shall be the arithmetic average of three contiguous one-hour periods of sulfur dioxide or nitrogen oxides as measured by the continuous emission monitoring system. Missing data shall not be filled nor shall the data be bias adjusted in accordance with 40 CFR Part 75. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any three-hour average exceeds emission limits of Section 2.1 A.1.b above (except during periods of startup, shutdown and malfunction) or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524. [40 CFR 60.8 and 60.45]
- h. i. If the compliance option under Section 2.1 A.1.f.i.(A) [COMS] above is selected, compliance with opacity limit in Section 2.1 A.1.b above shall be determined using six-minute averages of the COMS values. If any six-minute period average exceeds 20 percent opacity (except during periods of startup, shutdown and malfunction) except for one six-minute period per hour of not more than 27 percent opacity or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.
- ii. If the compliance option under Section 2.1 A.1.f.i.(B) [PM CEMS] above is selected, compliance with the opacity limit in Section 2.1 A.1.b above shall be determined by conducting Method 9 performance tests in accordance with §60.45(b)(7) according to the applicable schedule in §60.45(b)(7)(i). Compliance with the particulate limit in Section 2.1 A.1.b shall be determined using the PM CEMS.
- (A) The Permittee shall submit a written notification to the DAQ of intent to demonstrate compliance using the option under Section 2.1 A.1.f.i.(A) [COMS] or Section 2.1 A.1.f.i.(B) [PM CEMS] at least 30 calendar days before changing the compliance monitoring option.
 - (B) Each PM CEMS shall be installed, evaluated, operated, and maintained according to the requirements in §60.49Da(v).
 - (C) The initial performance evaluation shall be completed no later than 180 days after the date of notification to the DAQ of the first instance the Permittee selects the compliance option under Section 2.1 A.1.f.i.(B).
 - (D) When demonstrating compliance using option in Section 2.1 A.1.f.i.(B), the PM emission rate shall be determined based on a 24-hour daily (block) average of the hourly arithmetic average emissions concentrations using the CEMS outlet data each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Averages are only calculated for boiler operating days that have valid data for at least 18 hours of unit operation during which the standard applies. Instead, all of the valid hourly emission rates of the operating day(s) not meeting the minimum 18 hours valid data daily average requirement are averaged with all of the valid hourly emission rates of the next boiler operating day with 18 hours or more of valid PM CEMS data to determine compliance. The 24-hour block arithmetic average emission concentration shall be calculated using EPA Reference Method 19 of Appendix A of 40 CFR Part 60, section 4.1.
 - (E) At a minimum, valid PM CEMS hourly averages shall be obtained for 75 percent of all operating hours on a 30-day rolling average basis. Beginning on January 1, 2012, valid PM CEMS hourly averages shall be obtained for 90 percent of all operating hours on a 30-day rolling average basis. At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (F) The 1-hour arithmetic averages of PM CEMS data shall be expressed in pounds per million Btu and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of Subpart A of 40 CFR Part 60.
 - (G) All valid PM CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (E) above are not met.
 - (H) When PM emissions data are not obtained because of PM CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the DAQ or EPA Reference Method 19 of Appendix A of 40 CFR Part 60 to provide, as necessary, valid emissions data for a minimum of 90 percent (only 75 percent is required prior to January 1, 2012) of all operating hours per 30-day rolling average.

(I) Records shall be maintained according to the requirements specified in §60.45(h) for all Method 9 performance tests required in Section 2.1 A.1.h.ii above.

- i. Particulate matter emissions from the boilers shall be controlled by the electrostatic precipitator. To ensure that optimum control efficiency is maintained, the Permittee shall monitor the following parameters daily for values outside the normal operating range in each field or section:
 - i. Primary voltage,
 - ii. Secondary voltage,
 - iii. Primary current,
 - iv. Secondary current, and
 - v. Spark rate.

The results of the electrostatic precipitator monitoring shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:

- i. The date and time of actions recorded,
- ii. The normal range of values for each parameter, and
- iii. The values of each parameter.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these parameters are not monitored or these records are not maintained.

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

- j. The Permittee shall submit excess emissions and monitoring system performance reports for the sulfur dioxide, nitrogen oxide, and opacity continuous emissions monitoring systems, postmarked by the 30th day following the end of each calendar year quarter. The report shall include, as a minimum, the information required in 40 CFR 60.7(c), as follows:
 - i. **Sulfur Dioxide** - Report all three-hour periods of excess emissions (pounds per million Btu) during the reporting period including periods exempted during startup, shutdown and malfunction. Monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period shall be included.
 - ii. **Nitrogen Oxides** - Report all three-hour periods of excess emissions (pounds per million Btu) during the reporting period including periods exempted during startup, shutdown and malfunction. Monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period shall be included.
 - iii. **Opacity** - For periods when the COMS option under Section 2.1 A.1.f.i.(A) above is utilized, report all six-minute periods of excess emissions including all six-minute periods exempted during startup, shutdown and malfunction. For periods when the PM CEMS option under Section 2.1 A.1.f.i.(B) above is utilized, report all 24-hour daily (block) average excess emissions (pounds per million Btu) using the CEMS outlet data, including periods exempted during startup, shutdown, and malfunction; within 15 days of a written request, report all PM CEMS hourly averages (in written or electronic form) to show, at a minimum, that valid PM CEMS hourly averages have been obtained for 90 percent (only 75 percent is required prior to January 1, 2012) of all operating hours on a 30-day rolling average basis; and report results of all Method 9 performance tests required in Section 2.1 A.1.h.ii above.
- k. 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.
- l. The Permittee shall submit the results of all monitoring performed on the electrostatic precipitator in Section 2.1 A.1.i. above, within 30 days of a written request by the DAQ.
- m. All instances of deviations from the requirements of this permit must be clearly identified.

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

*** Paragraphs g and h of this section are not shielded pursuant to 15A NCAC 2Q .0512(a)**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 2D .0530, "Prevention of Significant Deterioration of Air Quality" as promulgated in 40 CFR 51.166. [15A NCAC 2D .0530]

- b. The following emission limits shall not be exceeded [15A NCAC 2D .0530]:

POLLUTANT	EMISSION LIMIT (lbs/million Btu)
Sulfur Dioxide	$[y(0.80) + z(1.2)]/(y+z)$
Nitrogen Oxides (as NO ₂)	$[y(0.30) + z(0.70)]/(y+z)$
Particulate Matter	0.10
y = percentage of total heat input derived from liquid fossil fuel z = percentage of total heat input derived from solid fossil fuel	

- c. To ensure compliance with the above limits, flyash shall not be reinjected into the boilers.
 d. Any use of the electrostatic precipitator high voltage control Energy Management System (EMS) feature requires a revision to this permit.

Testing [15A NCAC 2D .2601]

- e. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limits given in Section 2.1 A.2.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
 f. A stack test shall be conducted for particulate matter in accordance with Section 2.1 A.1.e. If the result of any test is greater than the limit given in Section 2.1 A.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- g. The Permittee shall comply with the applicable monitoring and recordkeeping requirements in Sections 2.1 A.1.f through i to demonstrate compliance with the sulfur dioxide, nitrogen oxides, and particulate matter limits in Section 2.1 A.2.b above.
 If any three-hour average SO₂ or NO_x emission rate as determined in Section 2.1 A.1.g exceeds the emission limits of Section 2.1 A.2.b above (except during periods of startup, shutdown and malfunction) or records are not maintained, or the parameters in Section 2.1 A.1.i are not monitored or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- h. The Permittee shall comply with the reporting requirements in Sections 2.1 A.1.j through m.

3. 15A NCAC 2D .0519: CONTROL OF NITROGEN OXIDES EMISSIONS

- a. Emissions of nitrogen oxides from these sources when burning coal and oil (No. 2 fuel oil or recycled No.2 fuel 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 only
 Qc = coal heat input in Btu per hour
 Qo = oil heat input in Btu per hour
 Qt = Qc + Qo

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3 except that notification of testing shall be given 30 days prior to testing in accordance with 40 CFR 60 Subpart D. 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 .0519.

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

- c. The monitoring, recordkeeping, and reporting requirements specified under 15A NCAC 2D .0524 in Sections 2.1 A.1.g and 2.1 A.1.j.ii shall satisfy this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0519 if the monitoring and recordkeeping requirements in Section 2.1 A.1.g are not performed.

STATE-ONLY REQUIREMENT:

4. The Permittee is allowed to burn recycled No. 2 fuel oil for light-off and flame stabilization in the Unit 1A and 1B Boilers as follows:

- a. The approved recycled No. 2 fuel oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

<u>Constituent/Property</u>	<u>Allowable Level</u>
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 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

It is the Permittee’s responsibility to ensure that the recycled No. 2 fuel oil meets the approved criteria for unadulterated fuel and the Permittee will be held responsible for any discrepancies discovered by Division of Air Quality as a result of any sampling and analysis of the used oil.

Monitoring/Recordkeeping

- b. The Permittee shall maintain accurate records of the actual amount of vendor approved recycled fuel oil delivered to, and combusted at the facility on an annual basis. These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.
- c. The Permittee shall maintain records of the results of the analytical testing of the vendor approved recycled No. 2 fuel oil as it is sampled and tested by the supplier (vendor). These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.

Reporting

- d. Within 30 days after any calendar year in which the Permittee purchases or burns recycled No. 2 fuel oil in Unit Boiler 1A or 1B, the Permittee shall submit in writing to the Regional Supervisor, Division of Air Quality, the following:
 - i. A summary of the results of the analytical testing for the previous 12 months; and
 - ii. The total gallons of recycled No. 2 fuel oil from each approved vendor and combusted at the facility for the previous 12 months.
- e. The Division of Air Quality reserves the right to require additional testing and/or monitoring of the recycled No. 2 fuel oil on an annual basis or without notice.

STATE-ONLY REQUIREMENT:

5. 15A NCAC 2Q .0700: TOXIC AIR POLLUTANT PROCEDURES

- a. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn the following as supplemental fuels in the Unit 1A and 1B Boilers:
 - i. Oils, either petroleum-derived or synthetic, used as a lubricant, hydraulic fluid, metal working fluid and insulating fluid or coolant,
 - ii. Solvents, including acetone, methanol, methyl ethyl ketone, toluene, varsol, xylene, and waste solvent mixtures containing less than 10 percent (by volume) of any non-halogenated solvent not listed above as referenced by 40 CFR 261.31, and
 - iii. Waste ethylene glycol solution antifreeze.
 - iv. The burning of any of the above materials as supplemental fuel is limited to the following conditions and stipulations:
 - (A) Only those supplemental fuels generated on site may be burned,

- (B) Total halogen content shall not exceed 1,000 micrograms per gram (parts per million),
- (C) Total lead content shall not exceed 250 micrograms per gram (parts per million),
- (D) Total PCB content of any insulating fluid or coolant shall not exceed 49 parts per million,
- (E) Supplemental fuels shall not be burned during periods of start-up, shutdown, or malfunctions,
- (F) Total supplemental fuel feed rate shall not exceed 300 gallons per hour, and 30,000 gallons per calendar year, and
- (G) Total supplemental flyash fuel shall be limited to 15,000 tons per calendar year.

Monitoring/Recordkeeping

- v. A daily record of the amount of supplemental fuels burned in the boilers shall be maintained on file and open for review by DAQ personnel upon request.
 - vi. Chemical analysis conducted on supplemental fuels burned at this facility shall be maintained on file and open for review by DAQ personnel upon request.
- b. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn waste ammonia/citric acid boiler cleaning solution in the Unit 1A and 1B Boilers.
- i. The waste ammonia/citric acid boiler cleaning solution shall be limited to the following maximum injection rates per unit:

<u>ID No.</u>	<u>Maximum Injection Rate</u>
Unit 1A Boiler	275 gallons per minute
Unit 1B Boiler	275 gallons per minute

Monitoring/Recordkeeping

- ii. The total amount of waste ammonia/citric acid cleaning solution injected in each boiler must be recorded on a daily basis and the record kept on file for a minimum of two years.
- iii. The Permittee shall notify the DAQ, Raleigh Regional Office, at least five days prior to waste boiler cleaning solution burning.

STATE-ONLY REQUIREMENT:

6. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

- a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Source	Toxic Air Pollutants	Emission Limit
Electric utility boilers (ID Nos. Unit 1A Boiler and Unit 1B Boiler) (total) when evaporating waste EDTA cleaning solution	Arsenic	595.3 lbs per year
	Cadmium	14,184.6 lbs per year
	Manganese	26,095.5 lbs per day
	Nickel	5,050.7 lbs per day
	Soluble Chromate Compounds, As Chromium (VI) Equivalent	521.9 lbs per day
	Mercury, Aryl And Inorganic Compounds	505.1 lbs per day

Monitoring/Recordkeeping/Reporting

- b. The total amount of waste EDTA (as 100% (NH₄)₄ EDTA) evaporated in the electric utility boilers (ID Nos. Unit 1A Boiler and Unit 1B Boiler) shall not exceed 98,382 lbs per year. The Permittee shall keep records and report to DAQ as follows:

- i. The total amount of waste EDTA injected in each boiler in pounds must be recorded on a daily¹ basis and the record kept on file for a minimum of two years.
- ii. The Permittee shall notify the DAQ, Raleigh Regional Office, at least five days prior to evaporating waste EDTA cleaning solution.

STATE-ONLY REQUIREMENT:

7. 15A NCAC 2D .2500: MERCURY RULES FOR ELECTRIC GENERATORS²

- a. The Permittee shall comply with all applicable provisions of 15A NCAC 2D .2500.
- b. The following table contains allocations in ounces of total mercury to be emitted annually:

SOURCE	ALLOCATION FOR 2010 – 2017 (Ounces)	ALLOCATION FOR 2018 AND LATER (Ounces)
Unit Boiler 1A	1188	479
Unit Boiler 1B	1153	465

- c. The owner or operator of any source covered under this Section shall be subject to the provisions of 40 CFR 60.4106(f). [15A NCAC 2D .2503(e)]

Monitoring, Reporting, And Recordkeeping [15 NCAC 2D .2503, .2505(a) and .2511]

- d. The emissions of mercury of an Hg budget source shall not exceed the number of allowances that it has in its compliance account according to Rule .2510 of this Section.
- e. The emissions measurements recorded and reported according to 40 CFR 60.4170 through 60.4176 shall be used to determine compliance by each source identified in this rule with its emissions limitation according to 40 CFR 60.4106(c).
- f. The provisions of 40 CFR 60.4106(d) shall be used for excess emissions.
- g. The owner or operator of a Hg budget unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.4106(b) and (e) and in 40 CFR 60.4170 through 60.4176.
- h. The Permittee shall comply with all applicable requirements of 15A NCAC 2D .2511 “Mercury Emission Limits”.

¹ Daily records are required only on the days when the Permittee is actually injecting waste EDTA in the electric utility boilers (ID Nos. Unit 1A Boiler and Unit 1B Boiler).

² Sections 15A NCAC 2D .2509 and .2511 are state-enforceable. All other sections of 15A NCAC .2500 will not be enforced at this time.

B. Flyash storage silo (ID No. SILO1) and associated bagfilter (ID No. BF1), Sodium carbonate storage silo (ID No. SILO7) with bin vent filter (ID No. BF6), Dry flyash transportation system (ID No. PFTS1) with transfer cyclone (ID No C1) and fabric filter (ID No. BF4), and Dry flyash transportation system (ID No. PFTS2) with transfer cyclone (ID No C2) and fabric filter (ID No. BF5)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 P^{0.67}$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	20 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 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 4.10 \times P^{0.67}$$

Where: E = allowable emission rate in pounds per hour
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from these emissions sources shall be controlled as delineated above. To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
 - i. An annual internal inspection of the baghouse structural integrity and fabric filters; and
 - ii. A monthly visual inspection of each system ductwork and material collection units for leaks.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork, collection cyclone, and fabric filters are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the duct work, collection cyclone, and fabric filter; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

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

- e. The Permittee shall submit the results of any maintenance performed on the systems within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Visible emissions from this source shall not be more than **20 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 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - (a) Immediately shutdown the source and repair the malfunction,
 - (b) Be deemed to be in noncompliance with 15A NCAC 2D .0521 or
 - (c) Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 B.2.a. above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Five coal storage silos (ID Nos. SILO2 through SILO6) with bagfilter (ID No. BF2), and Coal crusher (ID No. CRUSHER) and three conveyor drop points (ID Nos. CV2, CV9A and CV9B) with bagfilter (ID No. BF3)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 55.0(P)^{0.11} - 40$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	20 percent opacity except during periods of startup, shutdown and malfunction	15A NCAC 2D .0524 (40 CFR Part 60 Subpart Y)

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 55.0(P)^{0.11} - 40$$

Where: E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from these emission sources shall be controlled as delineated above. To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- An annual internal inspection of the bagfilters' structural integrity; and
 - A monthly visual inspection of the system ductwork, and material collection unit for leaks.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilter are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
- The date and time of actions recorded;
 - The results of each inspection;
 - The results of any maintenance performed on the bagfilter; and
 - Any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

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

- e. The Permittee shall submit the results of any maintenance performed on the bagfilter within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 2D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart Y, including Subpart A "General Provisions." [15A NCAC 2D .0524]
- b. On or after the date on which the performance test required to be conducted under 40 CFR 60.8 is completed, visible emissions shall not be **20 percent opacity** or greater except during periods of startup, shutdown and malfunction.

Testing [15A NCAC 2D .2601]

- c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- d. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - (a) Immediately shutdown the source and repair the malfunction,
 - (b) Deemed to be in noncompliance with 15A NCAC 2D .0524 or
 - (c) Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 C.2.b above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

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

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

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

- f. The Permittee shall submit a summary report of the observations by 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.

D. Coal unloading operation with wet suppression (ID No. COALDUMP)

Eleven coal conveyors (ID Nos. CV2, CV5, CV6, CV9A, CV9B, CV10A, CV10B, CV12A, CV12B, CV13A and CV13B)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity except during periods of startup, shutdown and malfunction	15A NCAC 2D .0524 (40 CFR Part 60 Subpart Y)

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

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 2D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart Y, including Subpart A "General Provisions." [15A NCAC 2D .0524]

- b. On or after the date on which the performance test required to be conducted under 40 CFR 60.8 is completed, visible emissions shall not be **20 percent opacity** or greater except during periods of startup, shutdown and malfunction.

Testing [15A NCAC 2D .2601]

- c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- d. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - (a) Immediately shutdown the source and repair the malfunction,
 - (b) Be deemed to be in noncompliance with 15A NCAC 2D .0524 or
 - (c) Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 D.1.b above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

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

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

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

- f. The Permittee shall submit a summary report of the observations by 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.

E. No. 2 fuel oil-fired 750 kW emergency diesel generator (ID No. EMGEN)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible Emissions	20 percent opacity (except during startup, shutdowns, and malfunctions 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 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521
HAPS	No applicable requirements - 40 CFR 63.6590(b)(3)	15A NCAC 2D .1111 (40 CFR 63, Subpart ZZZZ)

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

- a. Emissions of sulfur dioxide from this source shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining

compliance with this standard. [15A NCAC 2D .0516]

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

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

- a. Visible emissions from this source shall not be more than **20 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 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission points of this source for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If an emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - (a) Immediately shutdown the source and repair the malfunction,
 - (b) Be deemed to be in noncompliance with 15A NCAC 2D .0521 or
 - (c) Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 E.2.a above.

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

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

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

- e. The Permittee shall submit a summary report of the observations by 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. Limestone, Receiving, Storage, Transfer, and Grinding

Reclaim hopper transfer and belt feeder L1 (ID No. LSL1)

Belt feeder L1 transfer and conveyor L2 (ID No. LSL2)

Head chute gate transfer housing for conveyor L2 transfer to conveyor L3 (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG)

Conveyor L3 (ID No. LSL3)

Conveyor L3 transfer and storage silo (ID No. LSS1A) with fabric filter (ID No. CDLSS1A)

Head chute gate transfer and storage silo (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)

Wet ball mill grinders in preparation building (ID Nos. LSG1 and LSG2)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Ambient air quality standards, opacity, and control requirements for non-process fugitive dust pursuant to 15A NCAC 2D .0540 [See Facility Wide Requirements - Section 2.2 A.1]	15A NCAC 2D .0510
	0.022 grains per dry standard cubic foot for stack emissions and building vents	15A NCAC 2D .0524 [40 CFR 60.672(a)(1)]
	Control requirements for non-process fugitive dust [See Facility Wide Requirements - Section 2.2 A.2]	15A NCAC 2D .0540
Visible Emissions	Seven percent opacity for stack emissions and building vents	15A NCAC 2D .0524 [40 CFR 60.672(a)(2)]
	10 percent opacity for fugitive emissions (Excludes truck dumping to storage pile transfer point and truck and front end loader dumping into feed bin)	15A NCAC 2D .0524 [40 CFR 60.672(b)]
	No visible emissions from buildings, excluding building vents	15A NCAC 2D .0524 [40 CFR 60.672(e)(1)]

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART OOO

- a. On and after the date on which the performance test is completed, the Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions that:
 - i. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf) [40 CFR 60.672(a)(1)]; and
 - ii. Exhibit greater than 7 percent opacity [40 CFR 60.672(a)(2)].
 - iii. Emission sources with stack emissions affected by these requirements include:
 - (A) Head chute gate transfer housing for conveyor L2 transfer to conveyor L3 (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG),
 - (B) Conveyor L3 transfer and storage silo 1A (ID No. LSS1A) with fabric filter (ID No. CDLSS1A),
 - (C) Storage silo 1B (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)
 - (D) Any vent of any building enclosing any affected emission source including; the below grade enclosure for LSL1 and LSL2, the silo transfer structure, and the reagent preparation building.
- b. The Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions that exhibit greater than 10 percent opacity.
- c. The Permittee shall not allow to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions. Affected buildings include; the below grade enclosure for LSL1 and LSL2, the silo transfer structure, and the reagent preparation building.

Testing [15A NCAC 2D .2601]

- d. In addition to initial performance testing, emissions testing may be subsequently required to demonstrate compliance with an applicable permit condition. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 F.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Initial Performance Testing

- e. On and after the sixtieth day after achieving the maximum production rate at which an affected source will be operated, but not later than 180 days after initial startup, a performance test shall be conducted to demonstrate compliance with the applicable emissions limit. [40 CFR 60.8(a)]
- f. The Permittee shall determine compliance with the particulate matter standards using Method 5 or Method 17 to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.[40 CFR 60.675(b)]
- g. In determining compliance with the visibility standard of 10 percent opacity, the Permittee shall use Method 9 and the procedures in 40 CFR 60.11, with the following additions.
- i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
 - iii. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
 - iv. When determining compliance with the fugitive emissions 10 percent opacity standard, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - (A) There are no individual readings greater than 10 percent opacity; and
 - (B) There are no more than 3 readings of 10 percent for the 1-hour period. [40 CFR 60.675(c)]
- h. In determining compliance with the no visible emissions standard for building enclosures, the Permittee shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. [40 CFR 60.675(d)]
- i. The Permittee may use the following as alternatives to the reference methods and procedures specified in this permit:
- i. For the method and procedure of Section 4.c. above, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
 - (A) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream, or
 - (B) Separate the emissions so that the opacity of emissions from each affected facility can be read. [40 CFR 60.675(e)]
- j. Performance tests shall be conducted under conditions the DAQ shall specify to the plant operator based on representative performance of the affected source. The Permittee shall make available to the DAQ such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]
- k. The Permittee shall provide, or cause to be provided, performance testing facilities as follows:
- i. Sampling ports adequate for test methods applicable to such facility including;
 - (A) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and
 - (B) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;
 - ii. Safe sampling platform(s);
 - iii. Safe access to sampling platform(s); and
 - iv. Utilities for sampling and testing equipment.[40 CFR 60.8(e)]

- l. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable reference method of 40 CFR 60, Appendix A. Each run shall be conducted for the time and under the conditions specified for the applicable test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the Permittee's control, compliance may, upon the DAQ's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f)]

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

- m. Particulate matter from emission sources shall be controlled by fabric filter as delineated in the equipment list. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. A monthly visual inspection of the system ductwork and bag house for leaks; and
 - ii. An annual internal inspection of the bag house and ducting for structural integrity.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the ductwork, baghouse, and fabric filters are not inspected and maintained.
- n. For each emission sources, as listed above in Section 2.1 F., subject to an opacity standard listed, including building enclosures, once a month the Permittee shall observe the emissions point(s) for any visible emissions above normal to assure compliance. The Permittee shall establish "normal" for the sources in the first 30 days following completion of the initial performance test. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the source and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 2D .0524 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given above in Section 2.1 F.1. a.ii., b., and c..If compliance with the applicable limit cannot be demonstrated, the Permittee shall deemed to be in noncompliance with 15A NCAC 2D .0524.

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

- o. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the fabric filters, duct work, or baghouse; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.
- p. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

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

- q. The Permittee shall provide the DAQ at least 30 days prior notice of any performance test to afford the DAQ the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the DAQ as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the DAQ by mutual agreement. [40 CFR 60.8(d)]
- r. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in this permit, including reports of opacity observations made using Method 9 and Method 22 to demonstrate compliance. [40 CFR 60.676(f)]

- s. The Permittee shall submit a summary report of the monitoring and recordkeeping activities by 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.

G. Limestone Receiving and Storage Pile (ID No. LSRSP)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Ambient air quality standards, opacity, and control requirements for non-process fugitive dust pursuant to 15A NCAC 2D .0540 [See Multiple Emission Sources - Section 2.2 A.1]	15A NCAC 2D .0510
Visible Emissions	20 percent opacity	15A NCAC 2D .0521
Particulate Matter	Control requirements for non-process fugitive dust [See Multiple Emissions Sources - Section 2.2 A.2.]	15A NCAC 2D .0540

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

- a. Visible emissions from these sources shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 G.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission point (ID Nos. LSRSP) for any visible emissions above normal. The Permittee shall establish “normal” for these sources in the first 30 days following the start up of these sources. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

- (a) Immediately shutdown the source and repair the malfunction,
- (b) Be deemed to be in noncompliance with 15A NCAC 2D .0521 or
- (c) Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 G.1.a above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

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 a summary report of the observations postmarked on or before January 30 of each calendar

year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified

H. One Dry Flyash Silo Truck Loadout (ID No. ES-DFA Load) and associated Wet Flyash Conditioner (ID No. WS1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67} \quad \text{for } P \# 30 \text{ tons/hr, or}$ $E = 55.0 \times P^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source (ID No. ES-DFA Load) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 4.10 \times P^{0.67} \quad \text{for } P \# 30 \text{ tons/hr, or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$$

Where: E = allowable emission rate in pounds per hour
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. No monitoring/recordkeeping/reporting is required for emissions from this source.

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

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

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source (ID No. ES-DFA Load) for any visible emissions above normal. The Permittee shall establish “normal” for the source in the first 30 days following start-up of the source. If visible emissions from this source are observed to be above normal, the

Permittee shall either:

- (a) Immediately shutdown the source and repair the malfunction,
- (b) Be deemed to be in noncompliance with 15A NCAC 2D .0521 or
- (c) Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 H.2.a. above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be 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 observation and/or test noting the source with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

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 a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

I. Two Sorbent (lime or hydrated lime) Silos (ID Nos. ES-SORB1 and ES-SORB2) and associated Bagfilters (ID Nos. BF7 and BF8), and Sorbent Pneumatic Conveying Equipment (ID No. ES-SORB4 and ES-SORB5)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ for P # 30 tons/hr, or $E = 55.0 \times P^{0.11} - 40$ for P > 30 tons/hr Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period	15A NCAC 2D .0521

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 4.10 \times P^{0.67} \quad \text{for } P \# 30 \text{ tons/hr, or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$$

Where: E = allowable emission rate in pounds per hour
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1.I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from the sources (ID Nos. ES-SORB1 and ES-SORB2) shall be controlled by the associated bagfilters (ID Nos. BF7 and BF8). To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
 - i. An annual internal inspection of the bagfilters' structural integrity; and
 - ii. A monthly visual inspection of the system ductwork, and material collection unit for leaks.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a log book (written or electronic form) on site and made available to an authorized representative upon request. The log book shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the bagfilters; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

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

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Visible emissions from these sources (ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5) for any visible emissions above normal. The Permittee shall establish "normal" for these sources in the first 30 days following start-up of the sources. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - (a) Immediately shutdown the sources and repair the malfunction,
 - (b) Be deemed to be in noncompliance with 15A NCAC 2D .0521 or
 - (c) Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 2D .2601 (Method 9) for 30 minutes is below the limit given in Section 2.1 I.2.a. above.If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

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 a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

A. Limestone, Receiving, Storage, Transfer, and Grinding

Receiving and storage pile (ID No. LSRSP)

Reclaim hopper transfer and belt feeder L1 (ID No. LSL1)

Belt feeder L1 transfer and conveyor L2 (ID No. LSL2)

Conveyor L2 transfer and L2 head chute gate in transfer housing (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG)

Head chute gate transfer and conveyor L3 (ID No. LSL3)

Conveyor L3 transfer and storage silo 1A (ID No. LSS1A) with fabric filter (ID No. CDLSS1A)

Head chute gate transfer and storage silo 1B (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)

Wet ball mill grinders in preparation building (ID Nos. LSG1 and LSG2)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Ambient air quality standards, opacity, and control requirements for non-process fugitive dust pursuant to 15A NCAC 2D .0540	15A NCAC 2D .0510
Particulate Matter	Control requirements for non-process fugitive dust	15A NCAC 2D .0540

1. 15A NCAC 2D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

- a. The Permittee shall not cause, allow, or permit any material in a sand, gravel, or crushed stone operation to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.
- b. Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be regulated by Section 2.2 A.2. (15A NCAC 2D .0540).
- c. The Permittee shall control process-generated emissions from conveyors, screens, and transfer points, such that the applicable opacity standards in Section 2.1 F. (15A NCAC 2D .0524 - 40 CFR 60, Subpart OOO) and 2.1 G.1. (15 A NCAC 2D .0521) are not exceeded.

Testing [15A NCAC 2D .2601]

- d. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If emissions tests are required, the testing shall be performed in accordance with the applicable permit limit. If the results of this test are above the applicable limit, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0510.

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

- e. The Permittee shall comply with the monitoring/recordkeeping/reporting required in the applicable requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0510 if monitoring, recordkeeping, and recordkeeping are not conducted in accordance with the applicable permit condition

2. 15A NCAC 2D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES

- a. The Permittee shall not cause or allow fugitive non-process dust emissions (i.e., particulate matter that is not collected by a capture system and is generated from areas such as pit areas, process areas, haul roads, stockpiles, and plant roads) to cause or contribute to substantive complaints (i.e., complaints that are verified with physical evidence acceptable to the DAQ).

- b. If fugitive non-process dust emissions cause or contribute to substantive complaints, the Permittee shall:
 - i. Within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written description of what has been done and what will be done to reduce fugitive non-process dust emissions from that part of the facility that caused the second substantive complaint;
 - ii. Within 90 days of receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a control plan; and
 - iii. Within 30 days after the Director approves the plan, be in compliance with the plan.
- c. The Director may require that the Permittee develop and submit a fugitive non-process dust control plan if:
 - i. Ambient air quality measurements or dispersion modeling acceptable to the DAQ show violation or a potential for a violation of an ambient air quality standard for particulates in 15A NCAC 2D .0400 “Ambient Air Quality Standards;” or
 - ii. If the DAQ observes excessive fugitive non-process dust emissions from the facility beyond the property boundaries.

The control plan shall be submitted to the Director no later than 90 days after notification. The facility shall be in compliance with the plan within 30 days after the Director approves the plan.

- d. A fugitive dust control plan shall:
 - i. Identify the sources of fugitive non-process dust emissions within the facility;
 - ii. Describe how fugitive non-process dust will be controlled from each identified source;
 - iii. Contain a schedule by which the plan will be implemented;
 - iv. Describe how the plan will be implemented, including training of facility personnel; and
 - v. Describe methods to verify compliance with the plan.
- e. The Director shall approve the plan if he finds that:
 - i. The plan contains all required elements;
 - ii. The proposed schedule contained in the plan will reduce fugitive non-process dust emissions in a timely manner;
 - iii. The methods used to control fugitive non-process dust emissions are sufficient to prevent fugitive non-process dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and
 - iv. The described compliance verification methods are sufficient to verify compliance with the plan.

If the Director finds that the proposed plan does not meet the requirements, he shall notify the Permittee of any deficiencies in the proposed plan. The Permittee shall have 30 days after receiving written notification from the Director to correct the deficiencies.
- f. If after a plan has been implemented, the Director finds that the plan inadequately controls fugitive non-process dust emissions; he shall require the Permittee to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the Permittee shall submit a revision to his plan to correct the deficiencies.

B. Facility Wide

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutant Emissions	Emissions rates modeled to demonstrate compliance with acceptable ambient levels. State Only Requirement	15A NCAC 2D .1100

STATE-ONLY REQUIREMENT

1. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limit
Wastewater metals reduction bioreactor (ID No. WWTBR)	Hydrogen Sulfide	49.7 pounds per day

Monitoring/Recordkeeping/Reporting

- a. No monitoring, recordkeeping, or reporting is required.

2.3 - Permit Shield for Non-applicable Requirements

This condition is to clarify that issuance of this permit provides no shield from the Act, or regulations promulgated there under, including state regulations, pertaining to requirements of the New Source Performance Standards or major or minor new source preconstruction review requirements. The permit may be subject to reopening to include a compliance plan and schedule addressing any past or ongoing noncompliance with those provisions for any affected emission units. [40 CFR 70.6(c)(3), 70.6(f) and 70.7(f)]

The Permittee is shielded from the following non-applicable 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 .0537, Control of Mercury Emissions, is not applicable to the boilers or turbines because it does not apply to fuel combustion sources.**

2.4 - Phase II Acid Rain Permit Requirements

ORIS code: 6250 Effective: January 1, 2010 through December 31, 2014

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 for each affected unit

Boiler ID No.	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.				
	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 SO ₂ allowance allocations identified in this permit (See 40 CFR 72.84).				
	2010	2011	2012	2013	2014
1A	12807*	12807*	12807*	12807*	12807*
1B	12807*	12807*	12807*	12807*	12807*

C. NO_x Requirements for each affected unit

NO _x Requirements for each affected unit
<p>Pursuant to 40 CFR 76.11, the Division of Air Quality approves one NO_x emissions averaging plan for each unit. The plans are effective from calendar years 2010 through 2014.</p> <p>Under each 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 the plan year, then this unit shall be deemed to be in compliance for the 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 the plan year and if this unit fails to meet the annual average alternative contemporaneous emission limitation of 0.15 lb/MMBtu or has an annual heat input less than 16,685,025 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 necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

D. Comments, Notes and Justifications: None.

E. Phase II Permit Applications and Phase II NOX Compliance Plan (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 May 5, 2009

Phase II NOX Compliance Plan dated May 5, 2009

Phase II NOX Averaging Plan dated May 5, 2009

2.5 - Clean Air Interstate Rules (CAIR) Permit Requirements

ORIS code: 6250

The following sources are affected CAIR units:

PERMITTED SOURCE	CAIR ID No.
Unit 1A and Unit 1B Boilers	CS005

A. 15A NCAC 2D .2403: NITROGEN OXIDE EMISSIONS

1. The total nitrogen oxide (NO_x) emissions from Progress Energy Carolinas, Inc., Mayo Electric Generating Facility shall not exceed, except as provided in 15A NCAC 2D .2408:
 - a. 4,004 tons annually for 2009-2014; and
 - b. 3,407 tons annually for 2015 and later[15A NCAC 2D .2403]
2. The affected CAIR NO_x sources shall comply with the requirements of 15A NCAC 2D .2408 using the trading program and banking set out in 40 CFR Part 96.
[15A NCAC 2D .2407]
3. The owner or operator of any unit or source covered under 15A NCAC 2D .2403 shall be subject to the provisions of 40 CFR 96.106(f).
[15A NCAC 2D .2403(e)]

Monitoring/Recordkeeping/Reporting [15A NCAC 2D .2403, and 15A NCAC 2D .2407(a)]

4. The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.106(b) and (e), and 40 CFR 96 Subpart HH for each CAIR NO_x unit.
5. The emissions of nitrogen oxides of a CAIR NO_x source shall not exceed the number of allowances that it has in its compliance account established and administered under Rule .2408 of this Section.
6. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HH shall be used to determine compliance by each CAIR NO_x source with its emissions limitation according to 40 CFR 96.106(c) including 96.106(c)(5) and (6).
7. The provisions of 40 CFR 96.106(d) shall be used for excess emissions.

B. 15A NCAC 2D .2405: NITROGEN OXIDE EMISSIONS DURING OZONE SEASON

1. Ozone season NO_x emissions from Progress Energy Carolinas, Inc., Mayo Electric Generating Facility shall not exceed, except as provided in 15A NCAC 2D .2408:
 - a. 1,735 tons during the ozone season for 2009-2014; and
 - b. 1,476 tons during the ozone season for 2015 and laterThe ozone season shall be defined as the period of time extending from May 1st to September 30th of each calendar year.
[15A NCAC 2D .2405(a)(1) and (b)]
2. The affected CAIR NO_x Ozone Season sources shall comply with the requirements of 15A NCAC 2D .2400 using the trading program and banking set out in 40 CFR Part 96.
[15A NCAC 2D .2408]
3. The owner or operator of any unit or source covered under 15A NCAC 2D .2405 shall be subject to the provisions of 40 CFR 96.306(f).
[15A NCAC 2D .2405(g)]

Monitoring/Recordkeeping/Reporting [15A NCAC 2D .2405(d) and (e), and 15A NCAC 2D .2407(a)]

4. The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.306(b) and (e), and 40 CFR 96 Subpart HHHH for each CAIR Ozone Season NOx unit.
5. The nitrogen oxide ozone season emissions of a CAIR NOx Ozone Season source shall not exceed the number of allowances that it has in its compliance account established and administered under 15A NCAC 2D .2408. For purposes of making deductions for excess emissions for the ozone season in 2008 under the NOx SIP Call (15A NCAC 2D .1400), the Administrator shall deduct allowances allocated under this Rule (15A NCAC 2D .2405) for the ozone season in 2009.
6. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHHH shall be used to determine compliance by each CAIR NOx Ozone Season source with its emissions limitation according to 40 CFR 96.306(c) including 96.306(c)(5) and (6).
7. The provisions of 40 CFR 96.306(d) shall be used for excess emissions.

C. 15A NCAC 2D .2404: SULFUR DIOXIDE EMISSIONS

1. The annual allocation of sulfur dioxide allowances shall be determined by EPA. The allocations for CAIR SO² units are listed in the table below (these allocations are from 40 CFR 73.10):

SOURCE	ALLOCATION FOR 2000-2009	ALLOCATION FOR 2010 AND LATER
Unit Boiler 1A	12781	12807
Unit Boiler 1B	12781	12807

2. The affected CAIR SO₂ sources shall comply with the requirements of 15A NCAC 2D .2400 using the trading program and banking set out in 40 CFR Part 96.
[15A NCAC 2D .2408]
3. The owner or operator of any unit or source covered under 15A NCAC 2D .2404 shall be subject to the provisions of 40 CFR 96.206(f).
[15A NCAC 2D .2404(f)]

Monitoring/Recordkeeping/Reporting [15A NCAC 2D .2404 and .2407(a)(2)]

4. The emissions of sulfur dioxides of a source described in Section 2.5.C.1 above shall not exceed the number of allowances that it has in its compliance account established and administered under Rule 15A NCAC 2D .2408.
5. The owner or operator of a unit covered under 15A NCAC 2D .2404 shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.206(b) and (e) and in 40 CFR Part 96, Subpart HHH for each CAIR SO² unit.
6. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHH shall be used to determine compliance by each CAIR SO² source with its emissions limitation according to 40 CFR 96.206(c) including 96.206(c)(5) and (6).
7. The provisions of 40 CFR 96.206(d) shall be used for excess emissions

D. CAIR Permit Application (attached)

The permit application submitted for this facility, as approved by the Department of Environment and Natural Resources, Division of Air Quality, is part of this permit. The owner and operator of these CAIR NOx and SO² sources must comply with the standard requirements and special provisions set forth in the following attached application:

CAIR Permit Application received June 28, 2007

SECTION 3 - GENERAL CONDITIONS

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

- 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 NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

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

E. **Duty to Comply** [15A NCAC 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 re-issuance, 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. 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:

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

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

2. Section 502(b)(10) Changes [15A NCAC 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.

3. 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.

4. 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 re-issuance 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)(4)]

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(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 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 or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

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 description of the training and air testing experience of the person directing the test;
 - b. a certification of the test results by sampling team leader and facility representative;
 - c. 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);
 - d. 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;
 - e. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - f. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - g. 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.

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 re-issuance, 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.

MM. Fugitive Dust Control Requirement [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

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

NN. Specific Permit Modifications [15A NCAC 2Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. Mandatory Greenhouse Gas Reporting Requirements [15A NCAC 2Q .0508]

FEDERAL-ENFORCEABLE ONLY

If the Permittee is subject to requirements of 40 CFR 98.2(a), the Permittee shall submit all required reports to the EPA Administrator in accordance with 40 CFR 98.

ATTACHMENT
List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
BTU	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
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
NAA	Non-Attainment Area
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
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TPY	Tons Per Year
VOC	Volatile Organic Compound