



North Carolina Department of Environment and Natural Resources

Division of Air Quality

Michael F. Easley, Governor

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

XX XX, 2009

Mr. Charles B. Newsome
General Manager
Carolina Stalite Company
Post Office Drawer 1037
Salisbury, North Carolina 28145-1037

Dear Mr. Newsome:

SUBJECT: Air Quality Permit No. 03059T38
Facility ID: 8000003
Carolina Stalite Company
Gold Hill, North Carolina
Rowan County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for a significant modification of a Title V permit received July 30, 2007, we are forwarding herewith Air Quality Permit No. **03059T38** to Carolina Stalite Company, 16815 Old Beatty Ford Road, Gold Hill, Rowan County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. **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 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.

Permitting Section

1641 Mail Service Center, Raleigh, North Carolina 27699-1641

2728 Capital Blvd., Raleigh, North Carolina 27604

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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 XX, 2009 until June 30, 2012, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Charles F. Yirka at (919) 715-6250.

Sincerely yours,

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

Enclosure

c: Ron Slack, Supervisor, Mooresville Regional Office
Gregg Worley, EPA Region 4
Central Files

Summary of Changes Made to the Previous Permit (ID No. 03059T37)

Page	Section	Description of Change(s)
Cover letter	Cover letter	Change all dates, permit and application numbers and affected engineer. Copy the permit and review to EPA. Remove language referencing the last minor modification and include language indicating this is a significant modification.
Permit Title Page	Permit Title Page	Change all dates permit and application numbers.
6	Table of Emission Sources	Removed all footnotes associated with previous 502(B)10 changes and minor modifications as the minor modifications are now effective and the permit and review are going to notice and EPA. Updated remaining footnotes (numbers 1 and 2) not associated with the above.
7	2.1 A. Table	Included a new entry addressing NOx and RACT indicating RACT is no additional controls.
7	2.1 A.1.	From this point forward a changed all testing requirements citation from 2D .0501 to 2D .2601
15	2.1 A. 6.	Included new condition for 2D .1402 indicating RACT is no additional controls

INSIGNIFICANT ACTIVITIES

Source ID No.	Source Description
IES-1	portable screen (coal)
IES-2	single deck coal screen
IES-3	twin roll coal crusher
IES-4	9 coal storage silos
IES-5	14 conveyors (coal)
IES-6	6 enclosed weigh coal feeders
I33	bulk material stockpiles
I-B1, I-B2, I-B3, I-B4 and I-B5	five storage silos (12 ft diameter by 30 ft height; 93 ton capacity each)
I-B6, I-B7, I-B8, and I-B9	four storage silos (20 ft diameter by 30 ft height; 259 ton capacity each)
I-BA, I-BB, and I-BF	three storage silos (24 ft diameter by 40 ft height; 498 ton capacity each)
I-BC, I-BD, and I-BE	three storage silos (20 ft diameter by 40 ft height; 346 ton capacity each)
I-R1, I-R2, I-R3, I-R4, I-R5, I-R6, and I-R7	seven kiln feed silos (24 ft diameter by 40 ft height; 860 ton capacity each)

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

State of North Carolina,
Department of Environment,
and Natural Resources

Division of Air Quality



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03059T38	03059T37	XX XX, 2009	June 30, 2012

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 Stalite Company

Facility ID:

8000003

Facility Site Location:

16815 Old Beatty Ford Road

City, County, State, Zip:

Gold Hill, Rowan County, North Carolina 28071

Mailing Address:

Post Office Drawer 1037

City, State, Zip:

Salisbury, North Carolina 28145-1037

Application Number:

8000003.08D

Complete Application Date:

July 30, 2007

Primary SIC Code:

3281

Division of Air Quality,

Mooreville Regional Office

Regional Office Address:

**610 East Center Avenue, Suite 301
Mooreville, North Carolina 28115**

Permit issued the **XXnd** day of **XX** 2009.

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)

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(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

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ATTACHMENT

List of Acronyms

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in the permit unless otherwise specified.

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

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
Lightweight aggregate kilns and associated air pollution control equipment			
ES-1 and ES-2	two lightweight aggregate rotary expanding kilns (23 tons per hour capacity each) fired with coal or natural gas (52 million Btu per hour heat input rate each)	CD-1a CD-2a CD-1b CD-2b CD-2QDS	two hydrated lime slurry injection systems two bagfilters (7,313 square feet of filter area each) one packed bed scrubber (100 gallons per minute minimum liquid injection rate) installed on kiln ES-2
ES-3 and ES-4	two lightweight aggregate rotary expanding kilns (23 tons per hour capacity each) fired with coal or natural gas (52 million Btu per hour heat input rate each)	CD-3a CD-4a CD-3b ¹ CD-4b ¹	two hydrated lime slurry injection systems two bagfilters (7,313 square feet of filter area each)
ES-5 PSD	lightweight aggregate rotary expanding kiln (23 tons per hour capacity) fired with coal or natural gas (52 million Btu per hour heat input rate)	CD-5a CD-5b	one hydrated lime slurry injection system bagfilter (7,313 square feet of filter area)
ES-6 PSD	lightweight aggregate rotary expanding kiln (23 tons per hour capacity) fired with coal or natural gas (52 million Btu per hour heat input rate)	CD-6a CD-6b	one hydrated lime slurry injection system bagfilter (7,313 square feet of filter area)
ES-17 PSD, NSPS Subpart UUU, and CAM	lightweight aggregate rotary expanding kiln (35 tons per hour capacity) fired with coal or natural gas (79.1 million Btu per hour heat input rate)	CD-17a CD-17b	one hydrated lime slurry injection system bagfilter (10,820 square feet of filter area)
Flyash and lime storage silos			
ES-7	two flyash storage silos A-1,2, A-3,4 (3 tons per hour maximum process rate)	CD-7a CD-7b	two bagfilters FAB-1,2, FAB-3,4 (171 square feet of filter area each)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-8	two interconnected flyash storage silos A-8, Silos 1 and 2 (3 tons per hour maximum process rate)	CD-8	bagfilter FAB-8 (171 square feet of filter area)
ES-9	flyash storage silo A-5,6 (3 tons per hour maximum process rate)	CD-9	bagfilter FAB-5,6 (171 square feet of filter area)
ES-10	flyash storage silo A-7 (3 tons per hour maximum process rate)	CD-10	bagfilter FAB-7 (171 square feet of filter area)
ES-16	lime storage silo (15 tons per hour maximum process rate)	CD-16	bagfilter (147 square feet of filter area)
Material Crushing, Screening, and Handling Equipment			
ES-11, including:	Miscellaneous Crushing, Screening, and Handling Equipment	CD-11	Wet Suppression
T-1 ^{2*} and T-2	two 4-foot secondary crushers (123 tons per hour crushing capacity each)	water spray	
N-1, N-2 and N-3	three 4-foot tertiary gyradisc crushers (78 tons per hour crushing capacity each)	water spray	
DD-1 ^{2*}	one double-deck screen (6 feet x 16 feet)	water spray	
DD-2 ^{2*} and DD-3	two double-deck screens (5 feet x 12 feet each)	water sprays	
TD-2 and TD-3	two triple-deck screens (6 feet x 16 feet each)	water spray	
PM-1	one pugmill	water spray	
8 through 19, 21 ^{2*} , 22 through 25, 27 through 40, 41 ^{2*} through 44 ^{2*} 46 through 63, and 74	fifty-four belt conveyors (24 inches wide each)	water sprays (Nos. 12, 13, 18, 19, 21 ² , 22, 27, 28, 35, 44 ² , and 48 only)	
45a, 64 through 73, and 91 through 94	fifteen belt conveyors (30 inches wide each)	water sprays (Nos. 45a, 66, and 67 only)	
89 and 90	two belt conveyors (36 inches wide each)	water spray (No. 89 only)	
ES-12 (2 through 7 and 20) PSD	seven belt conveyors (24 inches wide each)	CD-12	water spray (6, 7 and 20 only)
ES-23a and ES-23b NSPS	two belt conveyors (24 inches wide each)	CD-23a and CD-23b	two water sprays
ES-25 NSPS	one slate conveyor (30 inches wide)	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-26a NSPS	one belt conveyor (36 inches)	CD-26a	water spray
ES-12 (2 through 7 and 20) PSD	seven belt conveyors (24 inches wide each)	CD-12	water spray (6, 7 and 20 only)
ES-23a and ES-23b NSPS Subpart OOO	two belt conveyors (24 inches wide each)	CD-23a and CD-23b	two water sprays
ES-25 NSPS Subpart OOO	one slate conveyor (30 inches wide)	N/A	N/A
ES-26a NSPS Subpart OOO	one belt conveyor (36 inches)	CD-26a	water spray
ES-27	one portable slate conveyor (24 inches wide)	N/A	N/A
ES-28 NSPS Subpart OOO	one slate conveyor (30 inches wide)	N/A	N/A
ES-29, including	Crushing, Screening, and Handling Equipment (Structural Plant)	CD-29	Wet Suppression
T-3 ² NSPS Subpart OOO	one 57-inch gryodisc secondary crusher (150 tons per hour maximum crushing rate)	water spray	
DD-4 ² NSPS Subpart OOO	one double-deck sizing screen (8 feet x 24 feet)	water spray	
TD-4 ² NSPS Subpart OOO	one triple-deck screen (8 feet x 24 feet)	water spray	
21c ² and 41a ² through 44a ² , and 95 through 101 NSPS Subpart OOO	thirteen belt conveyors (30 inches wide each)	water sprays (Nos. 21c and 44a only)	
102 and 107 NSPS Subpart OOO	two belt conveyors (48 inches wide each)	water spray (107 only)	
103 through 106 NSPS Subpart OOO	four belt conveyors (36 inches wide each)		
Other Sources			
ES-19 PSD and NSPS Subpart OOO	one flyash/dust storage silo (3 tons per hour maximum process rate)	CD-19	one bagfilter (171 square feet of filter area)
ES-21a and ES-21b PSD and NSPS Subpart OOO	two belt conveyors (24 inches wide each)	CD-21a and CD-21b	two water sprays

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-24a, ES-24ba and ES-24bb PSD and NSPS Subpart 000	three slate shuttle conveyors (30 inches wide each)	N/A	N/A
ES-22 PSD	one coal conveyor (24 inches wide)	N/A	N/A
ES-13 NSPS Subpart 000	triple deck screen (8 feet by 20 feet)	N/A	water spray

1. Permit No. 03059T24 on December 20, 2001 authorized Carolina Stalite to replace existing bagfilters (5,688 square feet, each) with new, larger bagfilters (7,313 square feet, each). As of the date of permit issuance, the bagfilters have not yet been replaced. However, Carolina Stalite retains authorization to replace the existing bagfilters.
2. These emission sources (ID Nos. ES-29: T-3, DD-4, TD-4, 21a, and 41a through 44) and associated water sprays may replace these emission sources (ID Nos. ES-11: T-1*, DD-1*, DD-2*, 21*, and 41* through 44*) and associated water sprays.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. Lightweight aggregate kilns (ID Nos. ES-1 through ES-6, and ES-17), hydrated lime slurry injection systems (ID Nos. CD-1a through CD-6a, and CD-17a), bagfilters (ID Nos. CD-1b through CD-6b, and CD-17b), and one packed bed scrubber system (ID No. CD-2QDS) installed on kiln No. 2**

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	stack emissions from each kiln shall be reduced by at least 95 percent by weight by the bagfilters (ID Nos. ES-1 through ES-6 and ES-17)	15A NCAC 2D .0511
sulfur dioxide	2.3 pounds per million Btu (ID Nos. ES-1 through ES-6 and ES-17)	15A NCAC 2D .0516
visible emissions	20 percent opacity (ID Nos. ES-3 through ES-6)	15A NCAC 2D .0521
visible emissions	40 percent opacity (ID Nos. ES-1 and ES-2)	15A NCAC 2D .0521
particulate	0.04 gr/dscf (ID No. ES-17)	15A NCAC 2D .0524 (40 CFR 60 Subpart UUU)
opacity	10 percent (ID No. ES-17)	15A NCAC 2D .0524 (40 CFR 60 Subpart UUU)

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	9.0 pounds per hour per kiln (ID Nos. ES-1 through ES-6)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
	11 pounds per hour (ID No. ES-17)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
sulfur dioxide	120.0 pounds per hour (ID Nos. ES-1 through ES-4)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
	74.9 pounds per hour per kiln (ID Nos. ES-5 and ES-6) 1.2 pounds per million Btu of heat input to each kiln from coal combustion only (ID Nos. ES-5 and ES-6)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
	106.5 pounds per hour (ID No. ES-17)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
sulfur dioxide	Submit and follow Compliance Assurance Monitoring (CAM) Plan	15A NCAC 2D .0614 (CAM)
nitrogen oxides	43.7 pounds per hour per kiln (ID Nos. ES-1 through ES-6)	15A NCAC 2D .0530 and 40 CFR 51.166(k)
	66.5 pounds per hour (ID No. ES-17)	
nitrogen oxides	RACT – no additional controls required	15A NCAC 2D .1402
malfunction abatement plan	as defined in specific conditions	15A NCAC 2D .0535
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. Particulate matter from any stack serving any lightweight aggregate kiln **(ID Nos. ES-1 through ES-6, and ES-17)** shall be reduced by at least 95 percent by weight before being discharged to the atmosphere. The 95-percent reduction shall be by air pollution control devices. [15A NCAC 2D .0511]

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 below the percent reduction requirement given in Section 2.1 A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) included in Section 2.1 A. 1. a. by testing one of the kilns **(ID Nos. ES-1 through ES-6, and ES-17)** on a rotating basis such that each kiln is tested once every seven years, starting 60 days after the issuance of the permit, in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. If the results of any of the tests are above the limit given in Section 2.1 A. 1. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511.

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

- d. Particulate matter emissions from each lightweight aggregate kiln shall be controlled by a bagfilter. 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 are 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 material collection unit for leaks; and
- ii. an annual internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if the ductwork and bagfilters are not inspected and maintained.

- e. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

- f. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- g. The Permittee shall submit a summary report of 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.

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

- a. Emissions of sulfur dioxide from the lightweight aggregate kilns (**ID Nos. ES-1 through ES-6, and ES-17**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2D .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 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above and with the limit listed in 2.1 A. 5.a.ii. by testing kiln No. 2 (**ID No. ES-2**) for sulfur dioxide emissions while operating the packed bed scrubber (**ID No. CD-2QDS**) utilizing EPA Reference Method No. 6, contained in 40 CFR Part 60 Appendix A or in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed and the results submitted within one year of issuance of permit unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516. If the results of this test are above the limit given in Section 2.1 A. 5.a.ii., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f) and 15A NCAC 2D .2601(A)]

- d. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the emission limit given in Section 2.1 A. 2.a. above, by using a continuous emission monitor system (CEMS) for sulfur dioxide on kiln No. 2 (**ID No. ES-2**) while operating the packed bed scrubber (**ID No. CD-2QDS**). The CEMS shall be installed and operating no later than the date of the initial performance test required pursuant to Condition 2.1 A. 2.c. of this permit. If any 24-hour block average exceeds 2.3 pounds per million Btu heat input, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516. If any hourly average exceeds 120 pounds per hour, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530. Compliance with sulfur dioxide emission standard of Condition 2.1 A. 2.a. above, shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values shall be summed, and the sum shall be divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR 75.
- e. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the emission limit given in Section 2.1 A. 2. a. above, by using a continuous emission monitor system (CEMS) for sulfur dioxide on kiln No. 7 (**ID No. ES-17**). The CEMS shall be installed and operating no later than the date of the initial performance test required pursuant to Condition 2.1 A.5 d. of this permit.
- f. The sulfur dioxide CEM on the kiln (**ID No. ES-17**) shall be installed, calibrated, maintained, tested, and operated

in accordance with 40 CFR Part 60, Appendix B, "Performance Specifications" and Appendix F, "Quality Assurance Procedures." If any 24-hour block average exceeds 2.3 pounds per million Btu heat input, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516. Compliance with sulfur dioxide emission standard of Condition 2.1 A.2.a. above, shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values shall be summed, and the sum shall be divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75.

- g. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall install and begin operation of hydrated lime slurry injection systems on kilns (**ID Nos. ES-1, ES-2, ES-5, and ES-6**) by August 1, 2002, and kilns (**ID Nos. ES-3 and ES-4**) by August 1, 2003. In accordance with the 15A NCAC 2Q .0512, the permit shield does not apply to the requirement of Section 2.1 A.2 .e. above, specifically to kilns (**ID Nos. ES-3 and ES-4**) until the revised permit is obtained to comply with the requirements of 15A NCAC .0516. The Permittee shall have one year from the date of issuance of the permit to submit a complete Title V application to the DAQ, pursuant to 15A NCAC 2Q .0504(d).
- h. The Permittee shall establish the correlation between the sulfur dioxide emission rate, the sulfur content of the fuel, the sulfur content of the aggregate, the sulfur content of the ash, the sulfur content of the product, and the hydrated lime slurry injection rate for one of the kilns (**ID Nos. ES-1 through ES-6**) having CEM installed by November 1, 2002.
- i. Between August 1, 2002 and November 1, 2002, the Permittee shall use the compliance monitoring procedure for the other five kilns (except the kiln having CEM installed), given below, to demonstrate compliance with the emission limit for sulfur dioxide given in Section 2.1 A. 2. a. above.

The potential uncontrolled sulfur dioxide emission rate from the other five kilns (**ID Nos. ES-1 through ES-6**) shall be calculated using the following equation:

$$M_{unc} = (40 * S_c * C) + (2 * R * S_r * 0.4)$$

where, M_{unc} = uncontrolled sulfur dioxide emission rate, lbs/hr, as measured by CEM
 S_c = coal sulfur content, %w
 C = coal feed rate, tons per hour
 R = rock feed rate, lbs per hour
 S_r = sulfur content in rock feed, %w

The allowable sulfur dioxide emission rate shall be calculated using the following equation:

$$M_{all} = [(C * H_c) + (R * H_r) + (G * H_g)] * [2.3 \text{ lbs/million Btu}]$$

where, M_{all} = allowable sulfur dioxide emission rate, lbs/hr
 C = coal feed rate, lbs per hour
 H_c = heating value of coal, million Btu/lb
 H_r = heating value of rock, million Btu/lb
 R = rock feed rate, lbs per hour
 G = natural gas feed rate, scf/hr
 H_g = heating value of natural gas, million Btu/scf

The required hydrated lime slurry injection rate shall be calculated using the following equation:

Hydrated lime slurry injection rate, lbs/hr =

$$(M_{unc} - M_{all}) * \text{lbs of hydrated lime slurry injection rate per lb of sulfur dioxide removed}$$

- j. After November 1, 2002, the Permittee shall apply the established correlation between the sulfur dioxide emission rate, the sulfur content of the fuel, the sulfur content of the aggregate, the sulfur content of the ash, the sulfur content of the product, and the hydrated lime slurry injection rate, as developed in Section 2.1 A. 2. f. above, to the other five kilns (**ID Nos. ES-1 through ES-6**), once a month for at least one year after the installation of hydrated lime slurry injection systems on these kilns. If less hydrated lime slurry is injected for these kilns than established by the correlation, as developed in Section 2.1 A. 2. f. above, the Permittee shall be in noncompliance with 15A NCAC 2D .0516.

- k. The Permittee shall maintain monthly production records specifying the types and quantities of raw materials and finished products processed and fuels burned, sufficient to calculate sulfur dioxide emissions in a log (written or in electronic format). These records shall include, but not necessarily be limited to:
- i. aggregate processed;
 - ii. aggregate sulfur content;
 - iii. coal fired;
 - iv. coal sulfur content;
 - v. finished products processed;
 - vi. finished product sulfur content;
 - vii. ash produced;
 - viii. ash sulfur content;
 - ix. cubic feet of natural gas fired;
 - x. hydrated lime slurry injection rate; and
 - xi. sulfur dioxide emission rates;

The Permittee shall keep the monthly records on file for a minimum of three years. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516, if the above parameters are not monitored or the records are not maintained.

- l. To comply with the provisions of this permit, the Permittee shall perform periodic inspections and maintenance of the hydrated lime slurry injection systems (**ID Nos. CD-1a through CD-6a and CD-17a**) as recommended by the manufacturer. In addition, the Permittee shall perform an annual inspection of the hydrated lime slurry injection systems. As a minimum, the annual inspection will include inspection of spray nozzles, lime feed system, and the cleaning/calibration of all associated instrumentation. If the inspections and maintenance of the hydrated lime slurry injection systems is not performed as specified here, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- m. The Permittee shall submit (a) a summary report of monitoring and recordkeeping activities, and sulfur dioxide emission rates as measured by continuous emission monitor for the kiln having a CEM installed and (b) a summary report of the information required as per Section 2.1 A. 2. i. above, 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.
- n. The Permittee shall submit any excess Sulfur Dioxide emission reports as measured by the CEM, 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. If there are no excess emissions, the Permittee shall submit a report stating that no excess emissions occurred during the semiannual reporting period.
- o. These monitors shall be deemed to be properly operated and maintained if the Percent Monitor Downtime (%MD) does not exceed 2.0 percent.

%MD Calculation for CEMS:

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

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

** If a source operates less than 2,200 hours during any semiannual period, the source may calculate the %MD using all operating data for the current semiannual period and the preceding calendar quarters until 2,200 hours of data are obtained.

If the quarterly MD is greater than 2%, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- a. Visible emissions from the sources (**ID Nos. ES-3 through ES-6**) shall not be more than 20 percent opacity when

averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

- b. Visible emissions from the sources (**ID Nos. ES-1 and ES-2**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 2D .0521(c)]

Testing [15A NCAC 2D .2601]

- c. 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 A. 3. a. (**ID Nos. ES-3 through ES-6**) or b. (**ID Nos. ES-1 and ES-2**) above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. To assure compliance, once a week the Permittee shall observe the emission sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 A. 3. a. (**ID Nos. ES-3 through ES-6**) or b. (**ID Nos. ES-1 and ES-2**) above

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521

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

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 the above 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.

4. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART UUU

- a. For the kiln (**ID No. ES-17**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart UUU, including Subpart A "General Provisions." [15A NCAC 2D .0524]

Emissions Limitations - [15A NCAC 2D .0524]

- b. The following emissions limits shall not be exceeded:

Affected Facility	Pollutant	Emission Limit
kiln (ID No. ES-17)	Particulate	0.04 gr/dscf
	Visible Emissions	10 percent

Testing [15A NCAC 2Q .2601]

- c. If emissions testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2601

and General Condition JJ. If the results of this test are above the limits given in Section 2.1 A. 4. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- d. Pursuant to 40 CFR 60.734(a) the Permittee shall install calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.
- e. Pursuant to 40 CFR 60.735(a) the Permittee shall:
 - i. Retain all monitoring measurements for at least two (2) years.
 - ii. Submit written reports semiannually to the Regional Supervisor of exceedances of control device operating parameters required to be monitored by 40 CFR Sec. 60.734. For the purposes of these reports, exceedances are defined as all six (6) minute periods during which the average opacity from the bagfilter is greater than 10 percent.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the above parameter is not monitored or the records are not maintained.

- f. Pursuant to 40 CFR 60.11(d), the kiln (**ID No. ES-17**) shall be deemed to be properly operated and maintained if the percentage of time the opacity emissions, calculated on a 6-minute average, in excess of **10 percent** (including startups, shutdowns, and malfunctions) does not exceed 3.0 percent of the total operating time for any given calendar quarter, adjusted for monitor downtime (MD) as calculated below. In addition, these monitors shall be deemed to be properly operated and maintained if the %MD does not exceed 2.0 percent.

CALCULATIONS for %EE and %MD

Percent Excess Opacity Emission (%EE) Calculation:

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

Percent Monitor Downtime (%MD) Calculation for COMS:

$$\%MD = \frac{\text{Total.Monitor.Downtime}^{**}}{\left(\text{Total.Source.Operating.Time}^{***}\right)} \times 100\%$$

* Total Excess Emission Time contains any 6-minute period greater than 10% opacity including startup, shutdown, and malfunction.

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

*** If a source operates less than 2,200 hours during any quarter, the source may calculate the %EE and/or %MD using all operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained.

If the quarterly EE is greater than 3% or MD is greater than 2%, the Permittee shall be deemed in noncompliance with 40 CFR 60.11(d).

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

- g. 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.

5. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The lightweight aggregate kilns (**ID Nos. ES-1 through ES-6**) shall discharge into the atmosphere, not more than:

- i. 9.0 pounds of particulate matter per hour per kiln;
 - ii. 120.0 pounds of sulfur dioxide per hour per kiln (**ID Nos. ES-1 through ES-4**);
74.9 pounds of sulfur dioxide per hour per kiln (**ID Nos. ES-5 and ES-6**);
1.2 pounds of sulfur dioxide per million Btu of heat input to each kiln from coal combustion only (**ID Nos. ES-5 and ES-6**);
 - iii. 43.7 pounds of nitrogen dioxide per hour per kiln;
[15A NCAC 2D .0530 and 40 CFR 51.166(k)]
- b. The lightweight aggregate kiln (**ID No. ES-17**) shall discharge into the atmosphere, not more than:
- i. 11 pounds of particulate matter per hour;
 - ii. 106.5 pounds of sulfur dioxide per hour;
 - iii. 66.5 pounds of nitrogen dioxide per hour;
[15A NCAC 2D .0530 and 40 CFR 51.166(k)]

Testing [15A NCAC 2Q .2601]

- c. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A. 5. a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).
- d. The Permittee shall complete a performance test of the kiln (**ID No. ES-17**), hydrated lime slurry injection system (**ID No. CD-17a**), and bagfilter (**ID No. CD-17b**) within 60 days after achieving the maximum production rate at which it will be operated, but not later than 180 days after its initial start-up, to demonstrate compliance with the particulate matter (including condensable particulate as measured by Method 202), sulfur dioxide, and nitrogen dioxide emission limits provided in Section 2.1 A. 5. b. The Permittee shall comply with all general testing requirements and reporting requirements pursuant to General Condition JJ as found in Section 3 of this permit. The Permittee shall complete all testing in accordance with the testing protocol provided to and approved by the DAQ. If testing is not completed as provided above or if testing results exceed the emission limitations provided in Section 2.1 A. 5. b., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).
- e. The Permittee shall demonstrate compliance with the emission limits of particulate matter (including condensable particulate as measured by Method 202) included in Section 2.1 A. 5. a. and b. above by testing one of the kilns (**ID Nos. ES-1 through ES-4**) and one of the kilns (**ID Nos. ES-5, ES-6, and ES-17**) on a rotating basis such that each kiln is tested once every seven years, starting January 1, 2003, in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. If the test results indicate that the particulate matter (including condensable particulate as measured by Method 202) emission rate exceed the 80% of the emission limit given in Section 2.1 A. 5. a. or b. above, the Permittee shall perform additional testing for particulate matter (including condensable particulate as measured by Method 202) once every year for the remaining duration of the permit on the kiln which exhibited the emission rate of particulate matter exceeding the 80% of the emission limit. If the results of any tests are above the limit given in Section 2.1 A. 5. a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).
- f. The Permittee shall demonstrate compliance with the emission limits for sulfur dioxide given in Section 2. A. 5. a. and b. above, by testing one of the kilns (**ID Nos. ES-1 through ES-4**) and one of the kilns (**ID Nos. ES-5, ES-6, and ES-17**) on a rotating basis such that each kiln is tested once every seven years, starting January 1, 2003, in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. If the results of any test are above the limits given in Section 2.1 A. 5. a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).
- g. The Permittee shall demonstrate compliance with the emission limits given in Section 2.1 A. 5. a. and b. above by testing one of the kilns (**ID Nos. ES-1 through ES-4**) and one of the kilns (**ID Nos. ES-5, ES-6, and ES-17**) for nitrogen oxides on a rotating basis such that each kiln is tested once every seven years, starting March 1, 2002, in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. If the results of any tests are above the limit given in Section 2.1 A. 5. a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).

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

- h. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the emission limit for kiln No. 7 (**ID No. ES-17**) given in Section 2.1 A. 5. b. ii. above, as follows:
- i. Monitor and record 24-hour average SO₂ emissions (in lb/mmBtu) by using a continuous emission monitoring

- system (CEM), as required in Conditions 2.1 A.2 c. and d. of this permit;
- ii. Monitor and record the 24-hour average heat input to the kiln (in mmBtu/hour), including contributions from coal and rock feeds; and,
 - iii. Calculate and record the 24-hour average SO₂ emission rate (in lb/hr) according to the following equation:

$$S = (C * H_{coal} + R * H_{rock}) (E_{SO_2})$$

Where:

S	=	Sulfur dioxide emission rate (in lb/hr);
C	=	Coal feed rate (in lb/hr);
H _{coal}	=	Heat content of coal (in mmBtu/lb);
R	=	Rock feed rate (in lb/hr);
H _{rock}	=	Heat content of rock (in mmBtu/lb); and
E _{SO₂}	=	Sulfur dioxide emission rate as measured by the CEM (in lb/mmBtu).

The hourly SO₂ emission limit is required to comply with the 24-hour NAAQS. The Permittee may use 24-hour average values in the calculation above to demonstrate compliance with the emission limit and associated NAAQS. If the records listed above are not created and maintained, or if the SO₂ emission rate exceeds the limitation provided in Condition 2.1 A.5 b.ii. results the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).

- i. The sulfur dioxide CEM on the kiln (**ID No. ES-17**) shall be installed, calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60, Appendix B, "Performance Specifications" and Appendix F, "Quality Assurance Procedures." If any 24-hour average monitored SO₂ emission rate exceeds the 106.5 lb/hr provided in Condition 2.1 A.5 b.ii. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.
- j. For kilns Nos. 5 and 6 (**ID Nos. ES-5 and ES-6**), the Permittee shall monitor the sulfur and heat content of all the coal burned during the period by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
 - i. the name of the coal supplier; and
 - ii. a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - (A) sampling - ASTM Method D 2234;
 - (B) preparation - ASTM Method D 2013;
 - (C) gross calorific value (Btu) - ASTM Method D-2015, D-3286 or D-1989;
 - (D) moisture content - ASTM Method D 3173; and
 - (E) sulfur content - ASTM Method D 3177 or ASTM Method D 4239.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k) if the sulfur and heat content of the coal is not monitored and recorded.

- k. For kilns Nos. 1 through 6 (**ID Nos. ES-1 through ES-6**), the Permittee shall apply the established correlation between the sulfur dioxide emission rate, the sulfur content of the fuel, the sulfur content of the aggregate, the sulfur content of the ash, the sulfur content of the product, and the hydrated lime slurry injection rate, as developed in Section 2.1 A. 2. f. above once a month for at least one year after the installation of hydrated lime slurry injection systems on these kilns. If less hydrated lime slurry is injected for these kilns than established by the correlation, as developed in Section 2.1 A. 2. f. above, the Permittee shall be in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k).
- l. For kilns Nos. 1 through 6 (**ID Nos. ES-1 through ES-6**), the Permittee is required to calculate and record in a log (written or electronic format) the pounds of sulfur dioxide per million Btu heat content of the coal per total shipment taking into account any controls operated during the same period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 and 40 CFR 51.166(k) if these records are not kept or if the results show an exceedance of the limit given in Section 2.1 A. 5. a. above.

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

- m. The Permittee shall submit a summary report of the coal supplier certifications and calculations of the pounds of sulfur dioxide per million Btu heat content of the coal per total shipment post marked 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.

- n. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities within 30 days after each calendar year quarter, due by January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the following:
 - i. The monthly particulate matter, sulfur dioxide, nitrogen dioxide, and carbon monoxide emissions for the previous 14 months. The emissions must be calculated for each of the 12-month periods over the previous 14 months; and
 - ii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2D .1402: APPLICABILITY

- a. Based on the review of Permit Application 8000003.08D the DAQ has determined that Reasonably Available Control Technology (RACT) for the emission sources above are no additional controls.

7. 15A NCAC 2D .0535: EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

For each permit modification, the Permittee shall amend or up-date the malfunction abatement plan (MAP) of May 2, 1997, as approved by the DAQ, for each kiln (**ID Nos. ES-1 through ES-6, and ES-17**) to meet the requirements of the permit within ninety (90) days of issuance. The amended or up-dated documents shall be submitted to the Regional Supervisor.

8. 40 CFR Part 64, 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING

Pursuant to 40 CFR Part 64 and 15A NCAC 2D .0614, the lightweight aggregate kiln (**ID No. ES-17**), with a maximum heat input capacity of 79.1 mmBtu/hr, is subject to the compliance assurance monitoring requirements.

Background

- *Affected Emission Units.* Lightweight aggregate kiln (**ID No. ES-17**)
- *Pollutant.* Sulfur dioxide
- *Control Technology.* Lime Slurry Injection System
- *Applicable Regulation, Emission Limit, and Monitoring Requirements.*
 - **15A NCAC 2D .0516.** Emissions of sulfur dioxide from the kiln (**ID No. ES-17**) 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. Compliance is demonstrated through the use of a continuous emission monitoring system (CEM).
 - **15A NCAC 2D .0530.** The lightweight aggregate kiln (**ID No. ES-17**) shall limit emissions of sulfur dioxide to no greater than 106.5 lb/hr. (**PSD**). Compliance is demonstrated through the use of a CEM.

CAM Plan

- a. The Permittee shall comply with the Continuous Assurance Monitoring (CAM) requirements for kiln No. 7 (**ID No. ES-17**) pursuant to 40 CFR Part 64 and 15A NCAC 2D .0614 as follows:
 - i. Monitor and record the 24-hour average SO₂ emissions (in lb/mmBtu) using a CEM in accordance with Conditions 2.1 A.2 c. and d. of this permit;
 - ii. Monitor and record the 24-hour average SO₂ emissions (in lb/hr) using a CEM in accordance with Condition 2.1 A.5. h. of this permit;The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if monitoring and recordkeeping is not completed as provided above.
- b. The Permittee shall conduct an inspection of the lime slurry injection system (**ID No. CD-17a**) each time the hourly emission rate is equal to or above 101.2 lb/hr (i.e., within 5% of the PSD emission limitation pursuant to Condition 2.1 A.5. b.ii.). The inspection shall, at a minimum, include an inspection of the flanges for proper spray, pumps, and an analysis of the lime slurry to ensure appropriate concentrations of calcium hydroxide are present. The Permittee shall retain records of each inspection, including the identification of any maintenance or repairs made as a result of such inspection. If the Permittee fails to conduct an inspection of the affected equipment or maintain records as provided above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614.

B. Flyash and lime storage silos (ID Nos. ES-7 through ES-10 and ES-16) and bagfilters (ID Nos. CD-7a, CD-7b, CD-8 through CD-10, and CD-16)

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	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
visible emissions	20 percent opacity	15A NCAC 2D .0521
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

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

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

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

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 .0501(c)(3) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from the flyash and lime storage silos shall be controlled by the bagfilters. 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 material collection unit for leaks; and
 - ii. an annual internal inspection of the bagfilter's structural integrity.
- 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 (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 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 kept.

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

- e. The Permittee shall submit a summary report of 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.

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

- a. Visible emissions from the flyash and lime storage silos shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 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. If the results of this test are above the limit given in Section 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 B. 2. a. above.
 If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 kept.

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.

C. Crushing, screening and handling equipment (ID No. ES-11), and conveyors (ID Nos. ES-12, ES-23a, ES-23b, ES-25, ES-26a, ES-27, and ES-28) and water sprays (ID Nos. CD-11, CD-12, CD-23a, CD-23b, and CD-26a)

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	crushers T-1, T-2, N-1, N-2, and N-3 shall be equipped with wet suppression control	15A NCAC 2D .0511
visible emissions	20 percent opacity (ID Nos. ES-11, ES-12, and ES-27)	15A NCAC 2D .0521
visible emissions	10 percent opacity (ID Nos. ES-23a, ES-23b, ES-25, ES-26a, and ES-28)	15A NCAC 2D .0524 (NSPS Subpart OOO)
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM₁₀ and total suspended particulates, from being exceeded beyond the property line.
- b. The Permittee shall control emissions from crushers with wet suppression.
- c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standards 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 the results of this test are above the limit given in Section 2.1 C.1.a. or c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511.

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

- e. To assure compliance, once a week, the Permittee shall observe the wet suppression systems installed on the crushers (**ID Nos. T-1, T-2, N-1, N-2, and N-3**) for proper operation. If the observations are not performed or the wet suppression systems are not properly operated the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0511.
- f. For remaining affected sources (**ID Nos. ES-12, ES-23a, ES-23b, ES-25, ES-26a, ES-27, ES-28, and ES-11, excluding crushers as provided above**), the monitoring, recordkeeping, and reporting requirements as included in Section 2.1 C. 2. and Section 2.1 C. 3. shall be sufficient to demonstrate compliance with the emission standard of Section 2.1 C. 1. a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if monitoring/recordkeeping requirements in 2.1 C. 2. and Section 2.1 C. 3. are not met.

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

- g. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation noting those sources that were observed to be in noncompliance along with any corrective actions taken; and,
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if these records are not kept.

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

- h. 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.

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

- a. Visible emissions from the sources (**ID No. ES-11, ES-12, and ES-27**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 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. If the results of this test are above the limit given in Section 2.1 C. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 C. 2. a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
- the date and time of each recorded action;
 - 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,
 - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not kept.

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.

3. 15A NCAC 2D .0524: NSPS 40 CFR 60 SUBPART OOO

- a. For the conveyors (**ID Nos. ES-23a, ES-23b, ES-25, ES-26a, and ES-28**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions." [15A NCAC 2D .0524]

Emissions Limitations - [15A NCAC 2D .0524]

- b. Visible emissions from the conveyors (**ID Nos. ES-23a, ES-23b, ES-25, ES-26a, and ES-28**) shall not be more than 10 percent opacity.

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. If the results of this test are above the limit given in Section 2.1 C.3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- d. To assure compliance, once a week the Permittee shall observe the emission sources for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 is below the limit given in Section 2.1 C. 3. b. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with NCAC 2D .0524.

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

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
- the date and time of each recorded action;
 - 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 kept.

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. Flyash/dust storage silo (ID No. ES-19) and bagfilter (ID No. CD-19)

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	0.022 gr/dscf	15A NCAC 2D .0524 (NSPS Subpart OOO)
visible emissions	7 percent opacity	15A NCAC 2D .0524 (NSPS Subpart OOO)
particulate matter	0.08 lb/hr	15A NCAC 2D .0530
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

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

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

Emission Limitations [15A NCAC 2D .0524]

- b. Emissions of particulate matter from the source (**ID No. ES-19**) shall not exceed 0.022 gr/dscf.
- c. Visible emissions from the source (**ID No. ES-19**) shall not be more than 7 percent opacity.

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 the results of this test are above the limit given in Section 2.1 D.1.b. or c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- e. Particulate matter emissions from the source (**ID No. ES-19**) shall be controlled by the associated bagfilter (**ID No. CD-19**). 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 material collection unit for leaks; and
 - ii. an annual internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the ductwork and bagfilter are not inspected and maintained.
- f. To assure compliance, once a month the Permittee shall observe the emission 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 point of the emission source in accordance with 15A NCAC 2D .2601 for 30 minutes is below the limit given in Section 2.1 D.1.b. and c. 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)]

- g. The results of inspection and maintenance in Section 2.1 D.1.e. above shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 bagfilter; and
 - iv. any variance from manufacturer’s recommendations, if any, and corrections made.
- h. The results of the monitoring in Section 2.1 D.1.f. above shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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)]

- i. 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.

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

- a. The flyash/dust storage silo (**ID No. ES-19**) shall discharge into the atmosphere not more than 0.08 pounds of particulate matter per hour and shall not exhibit visible emissions more than 7 percent opacity. [15A NCAC 2D .0530].

Testing [15A NCAC 2Q .2601]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 D. 2. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 D. 1.e. through h., and j. shall be sufficient to comply with the emission limit of Section 2.1 D. 2. a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if monitoring/recordkeeping requirements in Section 2.1 D. 1.e. through h. are not complied.

E. Two aggregate conveyors (ID Nos. ES-21a and ES-21b) and water sprays (ID No. CD-21a and CD-21b) and three slate shuttle conveyors (ID Nos. ES-24a, ES-24ba and ES-24bb)

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	-	15A NCAC 2D .0511
visible emissions	10 percent opacity	15A NCAC 2D .0524 (40 CFR 60, Subpart OOO)

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions (as surrogate to particulate matter)	10 percent opacity	15A NCAC 2D .0530
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM₁₀ and total suspended particulates, from being exceeded beyond the property line.
- b. The Permittee shall control emissions from crushers with wet suppression.
- c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standards 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.
- e. **Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]
The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 E. 2. d., e., and f. shall be sufficient to comply with the emission standard of Section 2.1 E. 1. a., above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if monitoring/recordkeeping requirements in Section 2.1 E. 2. d. and e. are not complied.

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

- a. For the conveyors (**ID Nos. ES-21a, ES-21b, ES-24a, ES-24ba and ES-24bb**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions." [15A NCAC 2D .0524]
Emissions Limitations - [15A NCAC 2D .0524]
- b. Visible emissions from the conveyors (**ID Nos. ES-21a, ES-21b, ES-24a, ES-24ba and ES-24bb**) shall not be more than 10 percent opacity.

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. 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 .0524.

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

- d. To assure compliance, once a week the Permittee shall observe each affected emission source for any visible emissions above normal. The Permittee shall establish "normal" for the conveyors (**ID Nos. ES-24ba and ES-24bb**), in the first 30 days following initial start-up. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 E. 2. a. above. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 kept.

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

- g. 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.
- h. Within 15 days of the installation of the conveyors (**ID Nos. ES-24ba and ES-24bb**), the Permittee shall submit information about the conveyor being replaced (**ID No. ES-24b**) and the conveyors (**ID Nos. ES-24ba and ES-24bb**). This information shall contain the following:
 - (i) The width of the conveyor being replaced (**ID No. ES-24b**) and
 - (ii) The width of the replacement conveyors (**ID Nos. ES-24ba and ES-24bb**).

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

- a. The conveyors (**ID Nos. ES-21a, ES-21b, ES-24a, ES-24ba and ES-24bb**) shall not exhibit visible emissions more than 10 percent opacity. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .2601]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 E. 3. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
- c. **Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]
The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 E. 2.d. through f. shall be sufficient to comply with the emission limit of Section 2.1 E. 2. a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if monitoring/recordkeeping requirements in Section 2.1 E.2. d. and e. are not met.

F. Coal conveyor (ID No. ES-22)

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	-	15A NCAC 2D .0511
visible emissions	20 percent opacity	15A NCAC 2D .0521
visible emissions (as surrogate to particulate matter)	10 percent opacity	15A NCAC 2D .0530

Regulated Pollutant	Limits/Standards	Applicable Regulation
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM₁₀ and total suspended particulates, from being exceeded beyond the property line.
- b. The Permittee shall control emissions from crushers with wet suppression.
- c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standards 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.

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

The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 F. 2. c., d., and e. shall be sufficient to comply with the emission limit of Section 2.1 F. 1. a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if monitoring/recordkeeping requirements in Section 2.1 F. 2. c. and d. are not complied.

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

- a. Visible emissions from the conveyor (**ID No. ES-22**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 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. If the results of this test are above the limit given in Section 2.1 F. 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 week the Permittee shall observe the emission sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 F. 2. a. above.
 If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 kept.

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.

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

- a. The coal conveyor (**ID No. ES-22**) shall not exhibit visible emissions more than 10 percent opacity when averaged over a six-minute period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .2601]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 F. 3. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 F. 2.c. through e. shall be sufficient to comply with the emission limit of Section 2.1 F. 3. a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if monitoring/recordkeeping requirements in Section 2.1 F.2. c. and d. are not complied.

G. Screening operation consisting of one triple deck screen (ID No ES-13)

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	Control emissions as needed to meet the applicable opacity standard.	15A NCAC 2D .0511
visible emissions	10 percent visible opacity - screening operation	15A NCAC 2D .0524 (40 CFR 60, Subpart OOO)

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM₁₀ and total suspended particulates, from being exceeded beyond the property line.
- b. The Permittee shall control emissions from crushers with wet suppression as needed to meet the applicable opacity standard.
- c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standards 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.

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

- e. The monitoring, recordkeeping, and reporting requirements as included in Section 2.1 G.2. d., e., and f. shall be sufficient to comply with the emission standard of Section 2.1 G.1.c. above.

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

- a. For the screening operation (**ID No. ES-13**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions." [15A NCAC 2D .0524]

- b. **Emissions Limitations** [15A NCAC 2D .0524]
Visible emissions from the screening operation (**ID No. ES-13**) shall not be more than 10 percent opacity.
- c. **Testing** [15A NCAC 2D .2601]
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 G. 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 week the Permittee shall observe the emission source (**ID No. ES-13**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0524 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.2. b. above. If the demonstration in (b) 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 kept.

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.

H. Crushing, screening and handling equipment (ID No. ES-29) including crusher (T-3), screens (DD-4 and TD-4), conveyors (21c, 41a through 44a, and 95 through 107) and water sprays (ID No. CD-29)

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	crusher (ID No. T-3) shall be equipped with wet suppression control	15A NCAC 2D .0511
visible emissions	10 percent opacity (ID Nos. 21c, 41a through 44a, 95 through 107, DD-4 and TD-4)	15A NCAC 2D .0524 (NSPS Subpart OOO)
	15 percent opacity (ID No. T-3)	
fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 2D .0540
toxic air pollutant emissions	See Section 2.2 B	15A NCAC 2D .1100

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutant emissions	See Section 2.2 C	15A NCAC 2Q .0711

1. 15A NCAC 2D .0511: PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

- a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM₁₀ and total suspended particulates, from being exceeded beyond the property line.
- b. The Permittee shall control emissions from crushers with wet suppression.
- c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standards 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 the results of this test are above the limit given in Section 2.1 H.1.a. or c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511.

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

- e. To assure compliance, once a week, the Permittee shall observe the wet suppression system installed on the crusher (**ID No. T-3**) for proper operation. If the observations are not performed or the wet suppression system is not properly operated the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0511.
- f. For the screens and conveyors (**ID Nos. DD-4, TD-4, 21c, 41a through 44a, and 95 through 107**), the monitoring, recordkeeping, and reporting requirements as included in Section 2.1 H. 2. shall be sufficient to demonstrate compliance with the emission standard of Section 2.1 H. 1.a. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if monitoring/recordkeeping requirements in 2.1 H. 2. are not met.

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

- g. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation noting those sources that were observed to be in noncompliance along with any corrective actions taken; and,
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0511 if these records are not kept.

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

- h. 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.

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

- a. For the crushing, screening and handling equipment (**ID No. ES-29**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions." [15A NCAC 2D .0524]

Emissions Limitations - [15A NCAC 2D .0524]

- b. Visible emissions from the conveyors (**ID Nos. 21c, 41a through 44a, and 95 through 107**) shall not be more than 10 percent opacity.
- c. Visible emissions from the screens (**ID Nos. DD-4 and TD-4**) shall not be more than 10 percent opacity.
- d. Visible emissions from crusher (**ID No. T-3**) shall not be more than 15 percent opacity.

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. If the results of this test are above the limit given in Section 2.1 H.2. b., c., or d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- f. To assure compliance, once a week the Permittee shall observe the emission sources for any visible emissions above normal. The Permittee shall establish “normal” for the crushing, screening, and handling equipment (**ID No. ES-29**) in the first 30 days following initial start-up. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 H. 2. b., c., or d. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with NCAC 2D .0524.

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

- g. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 kept.

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

- i. 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.

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

A. Non-process fugitive dust emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
fugitive non-process dust emissions	fugitive non-process dust emissions shall not cause or contribute to substantive complaints	15A NCAC 2D .0540

1. 15A NCAC 2D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES

- a. For the purpose of this Rule the following definitions shall apply:
 - i. "Fugitive non-process dust emission" means 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.
 - ii. "Substantive complaints" means complaints that are verified with physical evidence acceptable to the DAQ.
- b. The Permittee shall not cause or allow fugitive non-process dust emissions to cause or contribute to substantive complaints.
- c. If fugitive non-process dust emissions from a facility required to comply with this Rule 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 as described in Paragraph (e) of this Rule; and
- iii. within 30 days after the Director approves the plan, be in compliance with the plan.
- d. The Director may require that the Permittee develop and submit a fugitive non-process dust control plan as described in Paragraph e. of this Rule 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.
- e. The 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.
- f. The Director shall approve the plan if he finds that:
 - i. The plan contains all required elements in Paragraph (e) of this Rule;
 - 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 of this Paragraph 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.
- g. 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.
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0540 if a control plan is not submitted within the prescribed time or the facility does not comply with a control plan.

B. Facility-wide

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State-enforceable only Control of Toxic Air pollutants – Section 2.2 B.1.	15A NCAC 2D .1100
Toxic air pollutants	State-enforceable only Requirement for Facility Wide Emission of a toxic air pollutant to remain below its respective Toxic Pollutant Exemption Rates – See Multiple Emissions Sources Section 2.2 B.2.	15A NCAC 2Q .0711

- 1. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT, STATE ONLY REQUIREMENT** - 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(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
Facility-wide	Arsenic	6.88 lbs/yr
Facility-wide	Benzo(a)pyrene	100.0 lbs/yr
Facility-wide	Benzene	945.0 lbs/yr
Facility-wide	Beryllium	13.35 lbs/yr
Facility-wide	Bromine	8.55 lbs/hr
Facility-wide	Chromium VI	9.29 x 10 ⁻³ lb/yr
Facility-wide	Cadmium	0.521 lbs/yr
Facility-wide	Formaldehyde	0.052 lbs/hr
Facility-wide	Hydrogen Chloride	2.01 lbs/hr
Facility-wide	Hydrogen Fluoride	0.86 lb/hr, 20.6 lb/day
Facility-wide	Manganese	8.57 x 10 ⁻¹ lb/day
Facility-wide	Mercury	0.105 lbs/day

a. The Permittee shall maintain records of any other process operational information as is necessary to determine compliance with 15A NCAC 2D .1100. All records of compliance shall be maintained in a log book and made available for inspection by personnel of the Division of Air Quality for a period of two years from the date of recording.

2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENTS, STATE ONLY REQUIREMENT -Pursuant to 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.

- a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D.1100 "Control of Toxic Air Pollutants".
- c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

TPERs Limitations				
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Nickel (7440-02-0)		0.13		

SECTION 3 - GENERAL CONDITIONS (version 2.22.1)

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

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

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

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. Permit Modifications

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

H. Changes Not Requiring Permit Modifications

1. 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 reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 2Q .0503]

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

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]

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

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

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

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

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

W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]

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

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.

2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 2Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

**EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -
FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 2Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 2D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

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

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 2D .0501(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 reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 2Q .0508(i)(16)]

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

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).

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.

ATTACHMENT

List of Acronyms

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