



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

November 7, 2007

Mr. Howard P. Brown  
President  
Triangle Brick Company  
6523 Apex Road  
Durham, North Carolina 27713-9346

Dear Mr. Brown:

SUBJECT: Air Quality Permit No. 06987T09  
Facility ID: 05/1900077  
Triangle Brick Company-Merry Oaks Plant  
Merry Oaks, North Carolina  
Chatham County  
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for an Administrative Amendment of a Title V permit received September 26, 2007, we are forwarding herewith Air Quality Permit No. 06987T09 to Triangle Brick Company, Merry Oaks Plant, located on US Highway 1, in Merry Oaks, North Carolina authorizing the 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 have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

**The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the air emission sources (ID Nos. K-1, K-2, and K-3) on or before 12 months after commencing operation.**

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 thirty (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 the Office of Administrative

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

One  
North Carolina  
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Mr. Brown  
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Hearings, Post Office Drawer 27447, Raleigh, North Carolina 27611-7447. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Director of the Division of Air Quality. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding.

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.

**Unless exempted by a condition of this Air Quality Permit or the regulations, 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 this Division prior to construction. Failure to do so is a violation of GS 143-215.108 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 November 7, 2007 until January 31, 2008, 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 Michael Smithwick at (919) 715-6247.

Sincerely yours,

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

Enclosure

c: EPA Region IV, Permit only  
Raleigh Regional Office  
Central Files

**Insignificant Activities**  
Per 15A NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-Tank1	24,000 gallon No. 6 fuel oil storage tank
IS-Tank2	24,000 gallon No. 2 fuel oil storage tank
IS-Tank3	24,000 gallon No. 2 fuel oil storage tank
IS-Tank4	24,000 gallon highway diesel fuel storage tank
IS-Tank5	24,000 gallon additive "A" storage tank
IS-Tank6	3,000 gallon gasoline storage tank
IS-1.1	Conveyor to loam/sawdust system
IS-1.2	Conveyor to loam/sawdust system
IS-2.1	Loam screen
IS-2.2	Loam screen
IS-3.1	Loam crusher
IS-3.2	Loam crusher
IS-4.1	Oversize return conveyor from loam screen
IS-4.2	Oversize return conveyor from loam screen
IS-5.1	Oversize loam return shoot
IS-5.2	Oversize loam return shoot
IS-6.1	Sawdust screen
IS-6.2	Sawdust screen
IS-7.1	Conveyors to storage bin
IS-7.2	Conveyors to storage bin
IS-8.1	Oversize conveyor from sawdust screen
IS-8.2	Oversize conveyor from sawdust screen
IS-CD-50	Conveyor from extruder to pug mill
IS-CL1	Cosmetic loam operation area
IS-CL2	Cosmetic loam operation area
IS-EXTR1	Extrusion and setting line
IS-EXTR2	Extrusion and setting line
IS-LS1	Loam/sawdust feeders
IS-LS1	Loam/sawdust feeders

## Summary of Changes to Permit

The following changes were made to the Triangle Brick Company-Merry Oaks Plant Air Permit. New Permit No. 06897T09

<b>Page(s)</b>	<b>Section</b>	<b>Description of Change(s)</b>
Attachments	-	- Revised attachment summarizing changes to the Permit. - Converted Insignificant listing table to standard form
1	Cover Page	- Updated permit revision numbers and effective date. - Updated permit issuance date. - Updated Shell Language
3 - 33	All, Header	- Updated permit revision number.
7	Part I, Section 2.1 A.2	- Updated 2D .0521 Condition
11	Part I, Section 2.1 B.2	- Updated 2D .0521 Condition
14 -15	Part I, Section 2.1 C	- Removed the reference to MACT, Subpart JJJJ in the list of equipment subject to the specific limitations and conditions
16	Part I, Section 2.1 C.3	- Updated 2D .0521 Condition
22	Part I, Section 2.2 B (removed)	- Removed the specific limitations and conditions of MACT, Subpart JJJJ from the Permit.
22 - 29	Part I, Section 3	- Updated the General Conditions
30	Part II, Sections 1 and 2	- Updated Shell language
31 - 32	Part II, Section 3	- Updated the General Conditions

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

**Division of Air Quality**



**AIR QUALITY PERMIT**

<b>Permit No.</b>	<b>Replaces Permit No.</b>	<b>Effective Date</b>	<b>Expiration Date</b>
<b>06987T09</b>	06897T08	November 7, 2007	January 31, 2008

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission sources and associated air pollution control devices 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:** **Triangle Brick Company Merry Oaks Plant**

**Facility ID:** **05/19/00077**

**Facility Site Location:** **US Highway 1**  
**City, County, State, Zip:** **Merry Oaks, Chatham County, North Carolina 27559**

**Mailing Address:** **6523 Apex Road**  
**City, State, Zip:** **Durham, North Carolina 27713-9346**

**Application Number:** **1900077.07B**  
**Complete Application Date:** **September 26, 2007**

**Primary SIC Code:** **3251**

**Division of Air Quality,**  
**Regional Office Address:** **Raleigh Regional Office**  
**3800 Barrett Drive, Suite 101**  
**Raleigh, North Carolina 27609**

Permit issued this the 7th day of November, 2007

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

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# PART I

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

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) and appurtenances listed in Part I of 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
<b>Primary Crushing and Associated Conveyance</b>			
PC-1	Shale Feeder	None	None
PC-2	Scalp Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
PC-3	Jaw Crusher <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
PC-4	Conveyor under PC-2 and PC-3 <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-4A	Cover over conveyor belt
PC-5	Cross over Conveyor <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-5A	Cover over conveyor belt
PC-6	Shuttle Conveyor (Enclosed in Clay Storage Building) <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-6A	Cover over conveyor belt
<b>Clay Grinding Operations</b>			
CG-1	Clay Feeder	None	None
CG-2	Belt to Scalping Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-3	Scalping Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-4	Return Belt for Oversizes from Screens <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-4A	Cover over conveyor belt
CG-5	Belt to Hammermill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-5A	Cover over conveyor belt
CG-6	Hammermill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	PC-6A	Cover over conveyor belt
CG-7	Belt to Screens <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None
CG-8	Belt over Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None
CG-9	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None
CG-10	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None

-Table continued on the next page-

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

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>Clay Grinding Operations (continued)</b>			
CG-11	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-12	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-13	Belt to Storage Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-14	Belt over Storage Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-15	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-16	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	CG-9A	Screen Cover
CG-17	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	CG-10A	Screen Cover
CG-18	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	CG-11A	Screen Cover
CG-19	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	CG-12A	Screen Cover
CG-20	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-22	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-23	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-24	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-25	Conveyor from Storage Bin <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-26	Conveyor from Storage Bin <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-27	Conveyor to Pug Mill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-28	Conveyor to Pug Mill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-29	Clay Feeder	None	None
CG-30	Belt to Scalping Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-31	Scalping Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-32	Return Belt from Oversize Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-33	Belt to Hammermill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-34	Hammermill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None
CG-35	Belt to Screens <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None
CG-36	Belt over Finish Screens <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	N/A	None

-Table continued on the next page-

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

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
CG-37	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-38	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-39	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-40	Finish Screen <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-41	Belt to Storage Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-42	Belt over Storage Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-43	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-44	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-45	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-46	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-47	Feeders under Bins <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-48	Conveyor from Storage Bin <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
CG-49	Conveyor to Pug Mill <b>NSPS - 40 CFR Part 60 Subpart OOO</b>	None	None
<b>Brick Tunnel Kilns</b>			
K-1	Kiln 1 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons/hour fired-brick capacity, 21.4 million Btu/hour heat input rate)	CD-K1K2	One dry lime cascade adsorber unit (52,000 acfm air flow)
K-2	Kiln 2 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons/hour fired brick capacity, 21.4 million Btu/hour heat input rate)		
K-3	Kiln 3 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (29 tons/hour fired-brick capacity, 42.8 million Btu/hour heat input rate)	CD-K3	One dry lime cascade adsorber unit (52,000 acfm air flow)
<b>Rotary Coatings Dryer</b>			
SD-1	Natural gas-fired rotary coatings dryer - (0.3 million Btu/hour heat input) <b>NSPS - 40 CFR Part 60 Subpart UUU</b>	None	None

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. Primary Crushing and Associated Conveyance including: Shale Feeder (ID No. PC-1) and NSPS affected facilities consisting of a scalp screen (ID No. PC-2), jaw crusher (ID No. PC-3), and three conveyors (ID Nos. PC-4, PC-5, and PC-6)**

The following table provides a summary of limits and/or standards for the emission units in primary crushing and associated conveyance.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM <sub>10</sub>	$E = 4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour  Note limits and discussion in Section 2.1. A.1	15A NCAC 2D .0515
Visible emissions	20 percent opacity ( <b>ID No. PC-1</b> ) Note limits and discussion in Section 2.1. A.2	15A NCAC 2D .0521(d)
Visible emissions	Visible emissions from the affected units in the primary crushing and associated conveyance shall not exceed opacity limits of 15% and 10%, respectively. Note limits and discussion in Section 2.1.A.3.c	15A NCAC 2D .0524 <b>(40 CFR 60.670, Subpart OOO)</b>
Odors	Odorous emissions must be controlled - Section 2.2. A.2 Facility Wide Affected Emission Sources; <b>State-enforceable only</b>	15A NCAC 2D .1806

#### 1. 15A NCAC 2D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

##### Regulatory Requirements

- a. Emissions of particulate matter from the shale feeder (**ID No. PC-1**) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a) [Note this equation was chosen since the process throughput rate (process weight rate) is greater than 30 tons per hour]].

$$E = 55.0(P)^{0.11} - 40 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

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

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

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

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

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

- c. No monitoring, record keeping, or reporting is required for the particulate matter emissions from the shale feeder (**ID No. PC-1**)

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

**Regulatory Requirements**

- a. Visible emissions from the shale feeder (ID No. PC-1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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 .0501(c)(8)]

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

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

- c. To ensure compliance, once a month the Permittee shall observe the shale feeder (**ID No. PC-1**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. 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 .0501(c)(8) is below the limit given in Section 2.1 A.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 logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of monitoring and record keeping 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.

**3. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART OOO (40 CFR 60.670--60.676) STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS)**

**Regulatory Requirement**

- a. For the screening operation and belt conveyors (**ID Nos. PC-2, PC-4, PC-5, and PC-6**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of ten (10) percent opacity from each individual affected facility.
- b. For the jaw crusher (**ID No. PC-3**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) visible emissions limit of fifteen (15) percent opacity.
- c. For the shuttle conveyor (**ID No. PC-6**), which is enclosed in a building, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(e) emission limits in paragraphs (a) of this section (Section 2.1. A.3) and the Clay Storage Building (the building enclosing the shuttle conveyor (**ID No. PC-6**)) must comply with the following emission limit:
  - i. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any

transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent. A vent is defined in 40 CFR 60.671 as an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

- d. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- e. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- f. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."
- g. **Testing** [15A NCAC 2D .0501(c)(3)]  
Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.670 (Subpart OOO)) and 15A NCAC 2D .0501(c)(8) and (18) (requirements shall include indoor lighting and contrasting background) and General Condition JJ. If test results exceed the applicable limit(s) as given in Section 2.1 A.3.a., b., or c., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- h. In conducting the performance tests required in by 40 CFR 60.8, the owner or operator shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- i. In determining compliance with the visible emissions standards in 40 CFR 60.672 (b) and (c), **see Section 2.1 A.3.a or b, above**, the owner or operator shall use 40 CFR Part 60 Appendix A, Method 9 (i.e., Method 9) and the procedures in 40 CFR 60.11, with the following additions:
  - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
  - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- j. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- k. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b) [**Scalp Screen (ID No. PC-2), Conveyor under PC-2 and PC-3 (ID No. PC-4), Cross over conveyor (ID No. PC-5), and Shuttle conveyor (ID No. PC-6)**], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than 10 percent opacity; and
  - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
- l. When determining compliance with the fugitive emissions standard for the crusher (**ID No. PC-3**), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than 15 percent opacity; and
  - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- m. In determining compliance with 40 CFR 60.672(e), the Permittee shall use 40 CFR Part 60, Appendix A, Method 22 (i.e., Method 22) to determine fugitive emissions. The performance test shall be conducted while the shuttle conveyor (**ID No. PC-6**) is operating inside the **Clay Storage Building**. The performance test shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- n. The permittee may use either of the following procedures as alternatives to the reference methods and procedures specified in Sections 2.1 A.3.h., i., j., k., and l., above, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read:
  - i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the

individual affected facilities contributing to the emissions stream.

- ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.
- o. To ensure compliance with 40 CFR 60.672(b) and (c) [see Section 2.1. A.3.a. and b., above], the Permittee shall observe, on a monthly basis, fugitive emissions from each affected facility (i.e., the scalp screen (**ID No. PC-2**); the jaw crusher (**ID No. PC-3**); the conveyor under PC-2 and PC-3 (**ID No. PC-4**); and the cross over conveyor (**ID No. PC-5**)) for any visible emissions above normal. The Permittee shall establish “normal” for the affected facilities in the first 30 days following the effective date of the permit. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall be
  - i. be deemed to be in noncompliance with 15A NCAC 2D .0524 or
  - ii. demonstrate that the visible fugitive emissions, in accordance with 15A NCAC 2D .0501(c)(8) and (18) [see Sections 2.1 A. 3.h., i., j., k., and l., above] are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% opacity for conveyors and transfer points (**ID Nos. PC-2, PC-4, and PC-5**)] and (c) [15% opacity for crushers (**ID No. PC-3**)].If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524.
- p. To ensure compliance with 40 CFR 60.672(e) [see Section 2.1. A.3.c., above], the Permittee shall observe, on a monthly basis, fugitive emissions from the **clay storage building**, which houses the shuttle conveyor (**ID No. PC-6**), for any visible emissions. Should visible fugitive emissions be observed from this building, the Permittee shall be deemed to be in noncompliance with 15A NCAC 25 .0524, **UNLESS**, an approved Method 22 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) (see Section 2.1. A.3.m., above) is performed for visible fugitive emissions from the **clay storage building** and visible fugitive emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(e) [no visible emissions from buildings]. If compliance for the **clay storage building** cannot be demonstrated, then the shuttle conveyor (**ID No. PC-6**) shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS** an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 2D .0501(c)(8) and (18) [see Sections 2.1. A.3.h., i., j., k., and l., above], is performed on the shuttle conveyor (**ID No. PC-6**) and visible fugitive emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% for conveyors and transfer points]. If compliance for the shuttle conveyor (**ID No. PC-6**) cannot be demonstrated, then the shuttle conveyor (**ID No. PC-6**) shall be deemed to be in noncompliance with 15A NCAC 2D .0524.
- q. The results of the performance evaluations, discussed above in Section 2.1 A.3.o. and p., shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ 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
- l. 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.
- r. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

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

- s. The Permittee shall submit written reports of the results of all performance tests and evaluations conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672, see Section 2.1. A.3.a., b., c., and d., above, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b) and (c) and reports of using Method 22 to demonstrate compliance with 40 CFR 60.672(e) 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.
- t. The Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.
- u. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
  - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
  - ii. the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and

iii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

**B. Clay Grinding Operations (Feeders (ID Nos. CG-1 and CG-29) and NSPS affected facilities consisting of conveyors, screens, and hammer mills (ID Nos. CG-2 thru CG-20, CG-22 thru CG-28, and CG-30 thru CG-49))**

The following table provides a summary of limits and/or standards for the units that comprise the clay grinding operations.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM <sub>10</sub>	$E = 4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour Note limits and discussion in Section 2.1. B.1	15A NCAC 2D .0515
Visible emissions	20 percent opacity Note limits and discussion in Section 2.1. B.2	15A NCAC 2D .0521(d)
Visible emissions	Emissions of particulate matter and visible emissions from hammer mills and conveying systems shall not exceed limits discussed in Section 2.1. B.3	15A NCAC 2D .0524 <b>(40 CFR 60.670, Subpart OOO)</b>
Odors	Odorous emissions must be controlled - Section 2.2. A.2 Facility Wide Affected Emission Sources; <b>State-enforceable only</b>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

**Regulatory Requirements**

- a. Emissions of particulate matter from the clay feeders (ID No. CG-1 and CG-29) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$$E = 55.0(P)^{0.11} - 40 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

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

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

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. B.1.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. As the potential emissions of particulate matter are expected to be significantly less than the emission limits of 15A NCAC 2D .0515, no monitoring, record keeping, or reporting are required for the emissions from the clay feeders (ID Nos. CG-1 and CG-29)

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

**Regulatory Requirements**

- a. Visible emissions from the shale feeder (ID No. PC-1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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 .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in

Section 2.1. B.2.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the clay feeders (**ID No. CG-1 and CG-29**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. 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 .0501(c)(8) 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 logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of monitoring and record keeping 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.

**3. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART OOO (40 CFR 60.670--60.676) STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS)**

**Regulatory Requirement**

- a. As required by 40 CFR 60.672(a), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
- i. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
  - ii. Exhibit greater than 7 percent opacity
- b. For the screening operations and belt conveyors, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of ten (10) percent opacity from each individual affected facility.
- c. For the hammer mills (**ID Nos. CG-6 and CG-34**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of fifteen (15) percent opacity.
- d. As required by 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b), and (c) of this section (Section 2.1. B.3), or the building enclosing the affected facility or facilities must comply with the following emission limits:
- i. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671.
  - ii. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section (Section 2.1. B.3).
- e. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

- f. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- g. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

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

- h. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.670, Subpart OOO), 15A NCAC 2D .0501(c)(8) and (18) (requirements shall include indoor lighting and contrasting background) and General Condition JJ, has been or will be performed when determining compliance of each individual affected facility with 40 CFR 60.672(a), (b) and (c) **OR** Method 22 testing, in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.670 (Subpart OOO), 15A NCAC 2D .0501(c)(8) and (18) and General Condition JJ, has been or will be performed when determining compliance with the "no visible emissions" standard of 40 CFR 60.672(e). If test results exceed the applicable limit(s) as given in Section 2.1 C. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- i. In conducting the performance tests required in by 40 CFR 60.8, the owner or operator shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- j. In determining compliance with the particulate matter standards in 40 CFR 60.672 (b) and (c), **see Section 2.1 B.3. b and c, above**, the owner or operator shall use 40 CFR Part 60 Appendix A, Method 9 (i.e., Method 9) and the procedures in 40 CFR 60.11, with the following additions:
  - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
  - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- k. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- l. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b) [**screens, conveyors, belts, and feeders**], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than 10 percent opacity; and
  - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
- m. When determining compliance with the fugitive emissions standard for the hammer mills (**ID Nos. CG-6 and CG-34**), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than 15 percent opacity; and
  - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- n. In determining compliance with 40 CFR 60.672(e), the permittee shall use 40 CFR Part 60, Appendix A, Method 22 (i.e., Method 22) to determine fugitive emissions. The performance test shall be conducted while the affected units are operating inside the building enclosure. The performance test shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- o. The permittee may use either of the following procedures as alternatives to the reference methods and procedures specified in Sections 2.1 B.3.j., k., l., m., and n., above, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read:
  - i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
  - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read

- p. To ensure compliance with the emission limits defined in 40 CFR 60.672, the Permittee shall:
- i. observe, on a monthly basis, emissions from the building enclosing the clay grinding operations for any visible emissions. Should visible emissions be observed, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**, an approved Method 22 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO), **see Section 2.1. B.3.o., above**, is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(e) [0% opacity for buildings]. If compliance cannot be demonstrated, then each affected facility enclosed in the building for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 2D .0524 and 40 CFR 60.670, **UNLESS** a compliance demonstration for each affected unit of the clay grinding operation is performed using an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 2D .0501(c)(8) and (18) is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) and (c), see Sections 2.1. B.3.b., and c., above. If compliance of each enclosed affected facility cannot be demonstrated, then each affected facility for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 2D .0524 **OR**:
  - iii. observe, on a monthly basis, emissions from each enclosed affected facility for any visible emissions. Should visible emissions be observed for an affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**, an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 2D .0501(c)(8) and (18) is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% opacity for each screen, conveyor, feeder, or transfer point (**see units and limits listed in Section 2.1. B.3.h., above**)] and (c) [15% for each hammer mill (**ID Nos. CG-6 and CG-34**)]. If compliance of each enclosed affected facility cannot be demonstrated, then each affected facility for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 2D .0524.
- q. The results of the performance evaluations, discussed above in Section 2.1. B.3.q., shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ 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.
- r. To ensure compliance with the requirements of 40 CFR 60.672(a)(1), the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for each affected facility in the clay grinding operations. 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 semi-annual internal inspection of screens, belts, conveyors, and associated covers and duct work that comprise the clay grinding operations for deterioration, damage, and leaks.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the affected facilities and duct work in the clay grinding operations are not visually inspected.
- s. 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 of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the clay grinding operations are not inspected and maintained. The log shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of any maintenance performed on the clay grinding operations; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.
- t. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.
- Reporting** [15A NCAC 2Q .0508(f)]
- u. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b) and (c) and reports of observations using Method 22 to demonstrate compliance with 40 CFR 60.672(e) 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.

- v. The Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.
- w. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
  - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
  - ii. the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and
  - iii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

**C. Brick Tunnel Kilns (ID Nos. K-1, K-2, and K-3, 14.5, 14.5, and 29 tons per hour fired-brick capacity, respectively) with associated dry lime adsorbers (CD-K1K2 and CD-K3)**

The following table provides a summary of limits and/or standards for the brick tunnel kilns.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM <sub>10</sub>	$E = 4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Note limits and discussion in Section 2.1. C.1	15A NCAC 2D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input Note limits and discussion in Section 2.1 C.2	15A NCAC 2D .0516(a)
Visible emissions	20 percent opacity Note limits and discussion in Section 2.1. C.3	15A NCAC 2D .0521(d)
Sulfur dioxide	Facility-wide emissions shall not exceed 250 tons per year. Note limits and discussion in Section 2.1. C.4	15A NCAC 2Q .0317 15A NCAC 2D .0530 <b>PSD Avoidance</b>
Toxic air pollutants	Permit limits for toxic air pollutants shall not be exceeded. See Section 2.1. C.5. <b>State-enforceable only.</b>	15A NCAC 2D .1100
Odors	Odorous emissions must be controlled - Section 2.2. A.1 Facility Wide Affected Emission Sources; <b>State-enforceable</b>	15A NCAC 2D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed the levels listed in 2Q .0711 unless ambient standards are not exceeded; See Section 2.2. A.2 Facility Wide Affected Emission Sources; <b>State-enforceable only, See Multiple Emission Section 2.2</b>	15A NCAC 2Q .0711 15A NCAC 2Q .0705

**1. 15A NCAC 2D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

**Regulatory Requirements**

- a. Emissions of particulate matter from the brick tunnel kilns that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations: [15A NCAC 2D .0515(a)].

$E = 4.10 \times P^{0.67}$  as process weight rate is less than 30 tons per hour

Where E = allowable emission rate in pounds per hour calculated to three significant figures  
P = process weight rate in tons per hour

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

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3)

and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. C.1.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. As the potential emissions of particulate matter are expected to be significantly less than the emission limits of 15A NCAC 2D .0515, no monitoring, record keeping, or reporting are required for the emissions from the three brick tunnel kilns.

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

**Regulatory Requirements**

- a. Emissions of sulfur dioxide from the brick tunnel kilns 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(a)].

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. 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 .0516.

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

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in the kilns (**ID Nos. K-1, K-2, and K-3**).
- d. To ensure compliance **when firing No. 6 fuel oil**, the Permittee shall monitor the sulfur content and BTU content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
  - i. the name of the fuel oil supplier;
  - ii. the heat of combustion - BTU content
  - iii. the method used to determine the heat of combustion (BTU content) of the fuel oil
  - iv. the maximum sulfur content of the fuel oil received during the quarter;
  - v. the method used to determine the maximum sulfur content of the fuel oil; and
  - vi. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content and BTU content of the oil is not monitored and recorded.

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

- e. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The fuel summary report shall contain the following information:
  - i. the quantity and type of fuels burned
  - ii. the BTU value
  - iii. the sulfur content in percent by weight
  - iv. the calculated sulfur dioxide emission rates expressed in pounds of sulfur dioxide per million BTU input.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the calculated emission rates exceed 2.3 million pounds of sulfur dioxide per million BTU heat input.

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

**Regulatory Requirements**

- a. As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the brick tunnel kilns, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity 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 .0501(c)(8)]

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

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

- c. To ensure compliance, on a monthly basis the Permittee shall observe the brick tunnel kilns for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. 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 as soon as practicable and 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 .0501(c)(8) is below the limit given in Section 2.1 C.3.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 logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook 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 .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of monitoring and record keeping 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 2Q .0317 and 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION AVOIDANCE

3.

**Regulatory Requirement**

- a. To comply with this Permit and to avoid applicability of 15A NCAC 2D .0530, "Prevention of Significant Deterioration," as requested by the Permittee, emissions of sulfur dioxide from the facility must be **less than 250 tons** per consecutive twelve (12) month period. [15A NCAC 2D .0530]

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

- b. To ensure emissions do not exceed the limitations above, the following restrictions shall apply:
- The Permittee shall keep monthly records of the total amount of No. 2 fuel oil, No.6 fuel oil, and natural gas burned in the three brick kilns (ID Nos. K-1, K-2, and K-3)
  - The sulfur dioxide emissions from the combustion of each of the fuels shall be calculated each month using the following formulas:

$$E_{SO_2} = [(0.0627 \text{ lb SO}_2/\text{ tons bricks fired}) \times (XB) + (71 \text{ lbs SO}_2/ 1000 \text{ gallons No. 2 fuel oil}) \times (Y2) + (329.7 \text{ lbs SO}_2/ 1000 \text{ gallons No. 6 fuel oil}) \times (Z6) + (0.6 \text{ lbs SO}_2/ 10^6 \text{scf Natural gas}) \times (Ng) ] / (2,000 \text{ lbs/ton})$$

and where:

XB = tons of bricks manufactured per month

Y2 = gallons of No. 2 fuel oil combusted per month

Z6 = gallons of No. 6 fuel oil combusted per month

Ng = 10<sup>6</sup> scf of Natural gas

- iii. The sulfur contents of the No. 2 and No. 6 fuel oils shall not exceed 0.5 % by weight and 2.1% by weight, respectively. To ensure compliance, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
  - (a) the name of the fuel oil supplier;
  - (b) the maximum sulfur content of the fuel oil received during the quarter;
  - (c) the method used to determine the maximum sulfur content of the fuel oil; and
  - (d) a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the oil is not monitored and recorded.

- c. The monthly calculations of sulfur dioxide emissions shall be recorded in a log (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur dioxide emissions are not calculated and recorded.

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

- d. The Permittee must make copies of the monthly emissions log available to officials of the Division of Air Quality, upon request,. The Permittee must keep each entry in the monthly emissions log and all required records on file for a minimum of five (5) years.
- e. For compliance purposes, within thirty (30) days after each calendar year quarter, the Permittee shall report the monthly sulfur dioxide emissions for the previous fourteen (14) months to the Regional Supervisor, Division of Air Quality: The emissions must be calculated for each of the three twelve month periods over the previous fourteen months. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the total sulfur dioxide emissions from the facility exceed 250 tons/year.

**5. 15 A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS (STATE ONLY REQUIREMENT)**

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

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
Three brick kilns (ID Nos. K-1, K-2, and K-3)	Arsenic and inorganic arsenic compounds	38.63 pounds per year
	Benzene (71-43-2)	25,023.43 pounds per year
	Benzo(a)pyrene (50-32-8)	7,024.0 pounds per year
	Beryllium (7440-41-7)	873.33 pounds per year
	Cadmium (7440-43-9)	1,151.55 pounds per year
	Chlorine (7782-50-5)	1,131.88 pounds per day and 151 pounds per hour
	Chromium (vi)	17.30 pounds per year
	Hydrogen chloride (7647-01-0)	115.44 pounds per hour
	Hydrogen fluoride (7664-39-3)	878.11 pounds per day and 41.21 pounds per hour
	Mercury, vapor (7439-97-6)	44.36 pounds per day
	Nickel metal (7440-02-0)	4.95 pounds per day

**D. Natural Gas Fired Rotary Coatings Dryer (ID Nos. SD-1)**

The following table provides a summary of limits and/or standards for the rotary sand dryer.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input Note limits and discussion in Section 2.1. D.2	15A NCAC 2D .0516(a)
Particulate matter including PM <sub>10</sub> and visible emissions	Particulate emissions from the rotary coatings dryer shall not exceed 0.057 g/dscm and visible emissions shall not exceed 10% Note limits and discussion in Section 2.1. D.3	15A NCAC 2D .0524 <b>(40 CFR 60.730, Subpart UUU)</b>
Odors	Odorous emissions must be controlled - Section 2.2. A.1 Facility Wide Affected Emission Sources; <b>State-enforceable only</b>	15A NCAC 2D .1806

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

**Regulatory Requirements**

- a. Emissions of sulfur dioxide from the rotary coatings dryer 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(a)].

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the rotary coatings dryer.

**2. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART UUU (40 CFR 60.730 - 60.737) STANDARDS OF PERFORMANCE FOR CALCINERS AND DRYERS IN MINERAL INDUSTRIES)**

**Regulatory Requirement**

- a. As required by 40 CFR 60.732, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first, no emissions shall be discharged into the atmosphere from any affected facility that:
  - i. Contain particulate matter in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and;
  - ii. Exhibit greater than 10 percent opacity.
- b. As required by 40 CFR 60.11(c), the opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard
- c. As required by 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- d. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.730, Subpart UUU, including Subpart A "General Provisions."

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

- e. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.730, Subpart UUU), 15A NCAC 2D .0501(c)(3), (c)(8), and c(18) and General Condition JJ, has been or will be performed when determining compliance of each individual

affected facility with 40 CFR 60.732. If test results exceed the applicable limit(s) as given in Section 2.1 D.3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- f. In conducting the performance tests required in by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- g. In determining compliance with the particulate matter standards in 40 CFR 60.732, **see Section 2.1. D.3.a, above**, the Permittee shall determine compliance as follows:
  - i. 40 CFR Part 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
  - ii. 40 CFR Part 60, Appendix A, Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions.
- h. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- i. To ensure compliance with 40 CFR 60.730(b) (**see section 2.1. D.3.a.ii., above**) the Permittee shall observe, on a monthly basis, emissions from the rotary sand dryer (**ID No. SD-1**) for any visible emissions above normal. The Permittee shall establish “normal” for the affected facilities using weekly observations taken in the first 30 days following the effective date of the permit. Should visible emissions be observed to be above normal for an affected facility, the Permittee shall be
  - i. be deemed to be in noncompliance with 15A NCAC 2D .0524 or
  - ii. demonstrate that the visible fugitive emissions, in accordance with 15A NCAC 2D .0501(c)(8) and (18) [**see Section 2.1. D.3.h., above**] are demonstrated to comply with the applicable limit given in 40 CFR 60.732(b) [10% opacity].

If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524 and 40 CFR 60.730.

- j. The results of performance evaluations, discussed above in **Section 2.1. D.3.i.**, shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ 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.
- k. To ensure compliance with the requirements of 40 CFR 60.732(a) (**see section 2.1. D.3.a.i., above**) , the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for each affected facility in the rotary sand dryer. 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 semi-annual internal inspection of the units that comprise the rotary sand dryer for deterioration, damage, and leaksThe Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the affected facilities and duct work of the rotary sand dryer are not visually inspected.
- l. 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 of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the sand dryer is not inspected and maintained. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of any maintenance performed on the rotary sand dryer; and
  - iv. any variance from manufacturer’s recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.
- m. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

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

- n. As required in 40CFR 60.11(e)(2), the Permittee shall submit written summary reports of inspection and maintenance activities and the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.8 and 40 CFR 60.732, **see Section 2.1. D.3.a, 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.
- o. As required in 40 CFR 60.11(e)(1), the Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible emission observer certification.
- p. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
  - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
  - ii. the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and
  - iii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

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

### A. Facility-wide affected emission sources

The following table provides a summary of limits and standards applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	Odorous emissions must be controlled; <b>State enforceable only</b>	15A NCAC 2D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed the levels listed in 2Q .0711 unless ambient standards are not exceeded; <b>State-enforceable only</b>	15A NCAC 2Q .0711 15A NCAC 2Q .0705

#### 1. **15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS [STATE ONLY REQUIREMENT]**

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

#### 2. **15A NCAC 2Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS 15A NCAC 2Q .0705: EXISTING FACILITIES AND SIC CALLS [STATE ONLY REQUIREMENTS]**

- a. 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.
  - i. 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.
  - ii. **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".
  - iii. The Permittee shall maintain at the facility, records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Carbon disulfide (75-15-0)		3.9		
P-dichlorobenzene (106-46-7)				16.8
Formaldehyde (50-00-0)				0.04
Manganese and compounds		0.63		
Methyl chloroform (71-55-6)		250		64
Methyl ethyl ketone (78-93-3)		78		22.4
Perchloroethylene (127-18-4)	13,000			
Phenol (108-95-2)			0.24	
Styrene (100-42-5)			2.7	
Toluene (108-88-3)		98		14.4
Xylene (1330-20-7)		57		16.4

## SECTION 3 - GENERAL CONDITIONS

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

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

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

1. Section 502(b)(10) Changes [15A NCAC 2Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
2. Off Permit Changes [15A NCAC 2Q .0523(b)]  
The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
3. Emissions Trading [15A NCAC 2Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

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

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

**"Excess Emissions"** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (*Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.*)

**"Deviations"** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

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

Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

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

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

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

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

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

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

taken to mitigate emissions, and corrective actions taken.

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

**K. Permit Renewal [15A NCAC 2Q .0508(e) and 2Q .0513(b)]**

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

**L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 2Q .0508(i)(4)]**

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

**M. Duty to Provide Information (submittal of information) [15A NCAC 2Q .0508(i)(9)]**

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

**N. Duty to Supplement [15A NCAC 2Q .0507(f)]**

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

**O. Retention of Records [15A NCAC 2Q .0508(f) and 2Q .0508 (l)]**

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

**P. Compliance Certification [15A NCAC 2Q .0508(n)]**

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

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]

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

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .0519]

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

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

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

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

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

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

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

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

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

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

grounds for permit revocation and assessment of civil penalties.

- W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
  2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. Annual permit fee payments shall refer to the permit number.
  3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.
- X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]
- The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.
- Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]
- Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.
- Z. **Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]
- A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source, which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q, .0100 and .0300.
- AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]
- The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.
- BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(3)]
- The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.
- CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
  2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
  3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR, 82.166. Reports shall be submitted to the EPA or its designee as required.
- DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 2Q .0508(h)]
- If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
- EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -**  
FEDERALLY-ENFORCEABLE ONLY
- Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.
- FF. **Title IV Allowances** [15A NCAC 2Q .0508(i)(1)]
- This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances

as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

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

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

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

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

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

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 2Q .0508(i)(16)]

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

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

KK. **Reopening for Cause** [15A NCAC 2Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - b. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

- d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 2Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

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

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

## PART II

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

Table 1: The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances **associated with Air Quality Permit Application 1900077.05A:**

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
K-1	One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons per hour fired brick capacity, 21.4 million Btu per hour heat input)	CD-K1K2	One dry lime cascade adsorber unit (52,000 acfm air flow)
K-2	One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons per hour fired brick capacity, 21.4 million Btu per hour heat input)		
K-3	One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (29.0 tons per hour fired brick capacity, 42.8 million Btu per hour heat input)	CD-K-3	One dry lime cascade adsorber unit (52,000 acfm air flow)

These emission sources (ID Nos. K-1, K-2, K-3) and control devices (ID Nos. CD-K1, K2 and K-3) are listed as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

### SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

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

1. Any air emission sources or control devices listed in Section 1 must be constructed and maintained in accordance with the provisions contained herein and constructed and operated in accordance with provisions contained in Part I of this permit. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A NCAC, **Subchapter 2D .0515, .0521, .1806, .1111 (40 CFR Part 63, Subpart JJJJ).**
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) listed in Section 1 on or before 12 months after commencing operation.**

### **SECTION 3: GENERAL CONDITIONS:**

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

A. **Operating Conditions**

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

B. **General Provisions**

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

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

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit.

D. **Part II Renewal Request**

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

E. **Annual Fee Payment**

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

F. **Reporting Requirements**

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

1. changes in the information submitted in the application;
2. changes that modify equipment or processes; or
3. changes in the quantity or quality of materials processed.

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

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

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

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

H. **Inspection and Entry**

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:

1. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
2. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
3. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

I. **Circumvention** - STATE ENFORCEABLE ONLY

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

ATTACHMENT

**List of Acronyms**

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound