ROY COOPER Governor ELIZABETH S. BISER Secretary MICHAEL ABRACZINSKAS Director



#### EnterCalendar Date

Mr. Howard Brown, Jr. President & CEO Triangle Brick Company - Wadesboro Brick Manufacturing Plant 6523 NC Highway 55 Durham, NC 27713

SUBJECT: Air Quality Permit No. 08179T12 Facility ID: 0400043 Triangle Brick Company - Wadesboro Brick Manufacturing Plant Wadesboro Anson County Fee Class: Title V PSD Class: Major

Dear Mr. Brown:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 08179T12 authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS



North Carolina Department of Environmental Quality | Division of Air Quality 217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641 919.707.8400 Mr. Howard Brown, Jr. Enter XX or Calendar Date Page 2

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Anson County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

This Air Quality Permit shall be effective from *(Enter Permit Issuance Date)* until *(Enter Permit Expiration Date)*, 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 Eric L. Crump, P.E. at (919) 707-8470 or eric.crump@deq.nc.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review) Laserfiche (Facility ID: 0400043) Connie Horne (cover letter only)

#### NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

**Right of the Permit Applicant or Permittee to File a Contested Case:** Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

**Right of Other Persons Aggrieved to File a Contested Case:** Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

**General Filing Instructions:** A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

**Service Instructions:** A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel North Carolina Department of Environmental Quality 1601 Mail Service Center Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

\* \* \*

Additional information is available at <u>https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case</u>. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

## Summary of Changes to Permit

Page No.	Section	Description of Changes
Cover and throughout		<ul> <li>Updated all dates and permit revision numbers</li> <li>Updated all limits/standards summary tables to current standard format</li> <li>Changed all citations of 15A NCAC 2D to 15A NCAC 02D</li> <li>Changed all citations of 15A NCAC 2Q to 15A NCAC 02Q</li> </ul>
Insignificant Activities List	Attachment	Moved to Section 3 of permit
1	Cover page	<ul> <li>Added due date for submitting an application for permit renewal</li> <li>Added NAICS code</li> </ul>
2	Table of Contents	Changed Section 3 from "General Conditions" to "Insignificant Activities per 15A NCAC 02Q .0503(8)" Added new Section 4, "General Conditions"
3	List of Acronyms	Relocated here (formerly last page of permit)
8	2.1 A.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
10	2.1 A.3.c	Updated monitoring section to reflect the most current stipulations for 15A NCAC 02D .0521
11	2.1 A.4	Updated section to reflect the most current stipulations for 15A NCAC 02Q .0317
	2.1 A.4.b	Added requirement to test one of the brick kilns within 180 days of permit renewal to determine emission factors for HF and HCl
	2.1 A.4.e	Added "or if the grade of limestone is not the same grade of limestone and/or from the same source as was used during the performance test" to end of paragraph.
12	2.1 A.4.k	Added equations with emission factors for calculating emissions of HF and HCl. Also added new subparagraph iv, requiring submittal of permit application to revise HAP emission factors after testing.
13	2.1 A.4.1	Removed requirement to keep record of applicability determination on site. Re-lettered paragraph m (Reporting) as paragraph l.
14	2.1 B.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0524 (40 CFR Part 60, Subpart UUU)
15	2.1 B.2.e.iv(B) and v	Included option (from EPA Region IV) to use test Method 22 in lieu of Method 9 to determine opacity from dryer emissions
17	2.1 B.2.f	Indexed another to reflect the most of rest of the first Sector NGAO
17	2.1 C.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0524 (40 CFR Part 60, Subpart OOO)
19	2.1 D.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0524 (40 CFR Part 60, Subpart OOO)
20	2.1 D.1.h	Inserted logbook recordkeeping requirement for the NSPS Subpart OOO-affected clay grinding plant. The reporting requirement was renumbered as Section 2.1 D.1.i.
22	2.1 E.1.h	Inserted logbook recordkeeping requirement for the loam/sawdust preparation area. The reporting requirement was renumbered as Section 2.1 E.1.i.

The following changes were made to Air Permit No. 08179T11:\*

Page No.	Section	Description of Changes
24	2.1 F.1.h	Inserted logbook recordkeeping requirement for the NSPS Subpart OOO-affected secondary clay grinding plant. The reporting requirement was renumbered as Section 2.1 F.1.i.
25	2.2 A.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .1806
28	2.2 B.1.e	Deleted first sentence (repetitive).
31	3	Section 3 is now "Insignificant Activities per 15A NCAC 02Q .0503(8)"
32-40	4	Updated General Conditions to Version 6.0 dated January 7, 2022

\* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.



State of North Carolina Department of Environmental Quality Division of Air Quality

## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
08179T12	08179T11	XXXX	XXXX

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than *[enter date six months prior to expiration date]*.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, 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 –
	Wadesboro Brick Manufacturing Plant
Facility ID:	0400043
Primary SIC Code:	3251
NAICS Code:	327121
Facility Site Location:	2960 US Hwy 52 North
City, County, State, Zip:	Wadesboro, Anson County, North Carolina 28170
Mailing Address:	6523 NC Highway 55
City, State, Zip:	Durham, North Carolina 27713
Application Number(s):	0400043.22A
Complete Application Date(s):	December 6, 2022
Division of Air Quality,	Fayetteville Regional Office
<b>Regional Office Address:</b>	225 Green Street – Suite 714, Systel Building
5	Fayetteville, North Carolina 28301-5043
	2022

Permit issued this the XX day of XXXXX, 2023.

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section

By Authority of the Environmental Management Commission

#### Table of Contents

#### LIST OF ACRONYMS

- SECTION 1: PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES
- SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS
  - 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
  - 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- SECTION 3: INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)
- SECTION 4: GENERAL PERMIT CONDITIONS

#### List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
СО	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx NGDS	Nitrogen Oxides
NSPS NSR	New Source Performance Standard New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM <sub>2.5</sub>	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
РТЕ	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
$SO_2$	Sulfur Dioxide
ТАР	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

# 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	
	Two Brick Tunnel Kilns			
K-1	One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired Brick Tunnel Kiln (29.0 tons per hour material output rate, 42.8 million Btu per hour heat input rate)	CD-K1	Dry Limestone Adsorber (DLA)	
K-2	One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired Brick Tunnel Kiln (29.0 tons per hour material output rate, 42.8 million Btu per hour heat input rate)	CD-K2	Dry Limestone Adsorber (DLA)	
	Rotary Coatings Dryer			
SD-1 NSPS UUU	One natural gas-fired Rotary Coatings Dryer (8.1 tons of clay per hour material input rate, 0.3 million Btu per hour heat input rate)	N/A	N/A	
	Primary Crushing Plant and Associated Conveyances			
PC-1 and PC-2	Two shale feeders	N/A	N/A	
PC-3 and PC-4 NSPS OOO	Two scalp screens	N/A	N/A	
PC-5 and PC-6 NSPS OOO	Two jaw crushers	N/A	N/A	
PC-7 NSPS OOO	One conveyor under PC-3 and PC-5	N/A	N/A	
PC-8 NSPS OOO	One conveyor under PC-4 and PC-6	N/A	N/A	
PC-9 NSPS OOO	One cross-over conveyor	N/A	N/A	
PC-10 NSPS OOO	One shuttle conveyor	N/A	N/A	

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	Two Secondary Clay Grinding Plants and Asso	ociated Conveyances	
CG-1	One clay feeder	N/A	N/A
CG-2 NSPS OOO	One conveyor belt to scalping screen	N/A	N/A
CG-3 <b>NSPS OOO</b>	One scalping screen	N/A	N/A
CG-4 <b>NSPS OOO</b>	One return conveyor belt for oversize from screens	N/A	N/A
CG-5 NSPS 000	One conveyor belt to hammer mill	N/A	N/A
CG-6 <b>NSPS OOO</b>	One hammer mill	N/A	N/A
CG-7 NSPS 000	One conveyor belt under hammer mill	N/A	N/A
CG-8 NSPS 000	One conveyor belt to finish screens	N/A	N/A
CG-10 through CG-13 NSPS OOO	Four finish screens	N/A	N/A
CG-14 NSPS OOO	One fines conveyor belt under screens	N/A	N/A
CG-15 NSPS 000	One conveyor belt to storage bins	N/A	N/A
CG-16 NSPS 000	One conveyor belt over storage bins	N/A	N/A
CG-17 through CG-21 NSPS OOO	Five storage bins	N/A	N/A
CG-22 through CG-26 <b>NSPS OOO</b>	Five feeders under storage bins	N/A	N/A
CG-27 NSPS 000	One conveyor in front of storage bins	N/A	N/A
CG-28 NSPS OOO	One conveyor to pug mill	N/A	N/A
CG-29	One clay feeder	N/A	N/A
CG-30 NSPS OOO	One conveyor belt to scalping screen	N/A	N/A
CG-31 NSPS 000	One scalping screen	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
CG-32 NSPS 000	One return conveyor belt for oversize from screens	N/A	N/A
CG-33 NSPS 000	One conveyor belt to hammer mill	N/A	N/A
CG-34 <b>NSPS OOO</b>	One hammer mill	N/A	N/A
CG-35 <b>NSPS OOO</b>	One conveyor belt under hammer mill	N/A	N/A
CG-36 <b>NSPS OOO</b>	One conveyor belt to finish screens	N/A	N/A
CG-37 through CG-40 NSPS OOO	Four finish screens	N/A	N/A
CG-41 NSPS 000	One fines conveyor belt under screens	N/A	N/A
CG-42 NSPS 000	One conveyor belt to storage bins	N/A	N/A
CG-43 NSPS 000	One conveyor belt over storage bins	N/A	N/A
CG-44 through CG-48 NSPS OOO	Five storage bins	N/A	N/A
CG-49 through CG-53 NSPS OOO	Five feeders under storage bins	N/A	N/A
CG-54 NSPS 000	One conveyor in front of storage bins	N/A	N/A
CG-55 NSPS 000	One conveyor to pug mill	N/A	N/A
	Loam/Sawdust Preparation Operation and Associa	ated Conveyances	S
LS-1	Loam/sawdust feeder	N/A	N/A
LS-2 NSPS 000	One conveyor from loam/sawdust feeder to finish screens	N/A	N/A
LS-3 NSPS 000	One loam screen	N/A	N/A
LS-4 NSPS OOO	One loam crusher	N/A	N/A
LS-5 NSPS 000	One oversize return conveyor from LS-3	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
LS-6 NSPS OOO	One oversize return chute	N/A	N/A
LS-7 NSPS OOO	One fines conveyor belt under LS-3 to bunker belt conveyor	N/A	N/A
LS-8 NSPS OOO	One belt conveyor to bunker	N/A	N/A
LS-9 NSPS OOO	One storage bunker	N/A	N/A
LS-10 NSPS 000	One sawdust screen	N/A	N/A
LS-11 NSPS OOO	One conveyor to storage bins	N/A	N/A
LS-12 NSPS OOO	One oversize conveyor from sawdust screen	N/A	N/A

### SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

## A. Two natural gas/No. 2 fuel oil/No. 6 fuel oil-fired Brick Tunnel Kilns (ID Nos. K-1 and K-2) with associated dry limestone adsorbers (ID Nos. CD-K1 and CD-K2)

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	E=4.10 x P <sup>0.67</sup> , for process rates $\leq$ 30 tons per hour, OR	15A NCAC 02D .0515
	E=55 x $P^{0.11}$ – 40, for process rates > 30 tons per hour	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
	See Sections 2.2 B.1 and C.1	15A NCAC 02Q .0317
	Less than 250 tons per year	PSD Avoidance
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air	Less than 10 tons per year of any HAP and	15A NCAC 02D .0317
Pollutants	Less than 25 tons per year of a combination of HAPs	(Avoidance of 02D .1111)
Odors	State-enforceable only	15A NCAC 02D .1806
	See Section 2.2 A.1 - Odorous emissions must be controlled	
Toxic Air Pollutants	State-enforceable only	15A NCAC 02D .1100
	See Section 2.2 A.2	
	State-enforceable only	15A NCAC 02Q .0711
	See Section 2.2 A.3	_

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

#### 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the brick tunnel kilns (**ID Nos. K-1 and K-2**) shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \text{ x } P^{0.67}$	(for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \text{ x } P^{0.11} - 40$	(for process rates greater than 30 tons per hour)

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

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

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

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. To ensure compliance, the Permittee shall perform an inspection of the natural gas/No. 2 fuel oil/No. 6 fuel oil fired brick tunnel kilns in accordance with the following:

- i. every six months, perform a visual inspection of the brick tunnel kilns' emissions ductwork system for leaks, holes, or disrepair; and
- ii. every six months, perform a visual inspection of the brick tunnel kilns' fuel combustion systems.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the inspections of the system ductwork or fuel combustion systems are not performed.

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

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

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0515. if these records are not maintained.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the brick tunnel kilns (**ID** Nos. K-1 and K-2) 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.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the combustion of natural gas/No. 2 fuel oil in these sources.
- No more than 216 of the 310 burners in each of the brick tunnel kilns (ID Nos. K-1 and K-2) shall be fired with No. 6 fuel oil at one time because the preheat section (94 burners) of the kilns are only capable of firing natural gas and No. 2 fuel oil. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if more than 216 burners in either kiln are fired with No. 6 fuel oil at one time.
- e. The maximum sulfur content of any No. 6 fuel oil received and burned in the brick tunnel kilns (ID Nos. K-1 and K-2) shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil exceeds this limit.
- f. To ensure compliance, 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 logbook (written or electronic format) on a quarterly basis and include the following information:
  - i. the name of the fuel oil supplier;
  - ii. the maximum sulfur content of the fuel oil received during the quarter;
  - iii. the method used to determine the maximum sulfur content of the fuel oil; and
  - iv. 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 02D .0516 if the sulfur content of the No. 6 fuel oil is not monitored and recorded.

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

g. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 A.2.d through f above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the brick tunnel kilns (**ID Nos. K-1 and K-2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. K-1 and K-2) 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 these sources 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 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a (or b) above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period, or the percent opacity demonstration cannot be made.

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

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

The Permittee shall be deemed in non-compliance with 2.1 A.3. a. if records of the monitoring results are not maintained.

- e. The Permittee shall submit, in writing:
  - i. a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified; and
  - ii. any non-complying emission sources that exceed the applicable opacity limit(s) of 2.1 A.3.a, along with the duration of non-compliance, the determined cause of exceedance and the resulting corrective action taken. This report shall be submitted to the Regional Supervisor, Division of Air Quality, within ten (10) days of such an occurrence.

#### 4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. In order to remain classified a minor source for hazardous air pollutants (HAP), and avoid applicability of 40 CFR 63 Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Brick And Structural Clay Products Manufacturing, facility emissions shall be less than:
  - i. 10 tons per year of each hazardous air pollutant, and
  - ii. 25 tons per year of all hazardous air pollutants combined.

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

b. The Permittee shall test one of the two brick kilns (ID Nos. K-1 and K-2) and determine emissions factors for both hydrogen fluoride (HF) and hydrogen chloride (HCl) for both uncontrolled (i.e., when the kilns are operated in bypass mode or when the DLAs (ID Nos. CD-K1 and CD-K2) are not in operation) and controlled operation scenarios (i.e., when the kilns are operated with the DLAs in operation) in accordance with the emissions testing and reporting requirements in General Condition JJ. Testing shall be completed and the test results submitted within 180 days of issuance of Air Quality Permit 08179T12 unless an alternate date is approved by the DAQ. If this test is not conducted, the test report is not submitted to DAQ when due, or the emissions factors for HF and HCl are not determined, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

#### Monitoring/Record keeping Requirements [15A NCAC 02Q .0508(f)]

- c. The Permittee shall operate the dry lime adsorbers (DLAs) (**ID Nos. CD-K1 and CD-K2**) at all times the brick tunnel kilns (**ID Nos. K-1 and K-2**) are in operation, except during periods of startup, shutdown, malfunction, or during operation in bypass mode for routine maintenance of the DLAs (**ID Nos. CD-K1 and CD-K2**).
- d. The Permittee shall maintain an adequate amount of limestone in the limestone hopper and storage bin (located at the top of the DLA), and DLAs (**ID Nos. CD-K1 and CD-K2**) at all times. The hopper and storage bin shall be resupplied with limestone whenever the low-level indicator is activated.
  - i. Once per day, the Permittee shall verify that the limestone hopper and storage bin at the DLAs (**ID Nos. CD-K1** and **CD-K2**) contain adequate limestone and record the results.
  - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met, if the Permittee does not operate the DLAs per Section 2.1 A.4.c, and/or if the Permittee does not maintain an adequate amount of limestone as provided above.

- e. The Permittee shall use the same grade of limestone at the DLAs (**ID Nos. CD-K1 and CD-K2**) from the same source as was used during the performance test. The Permittee shall maintain records of the source and grade of limestone used. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained, or if the grade of limestone is not the same grade of limestone and/or from the same source as was used during the performance test.
- f. The Permittee shall maintain the limestone feeder settings at the DLAs (**ID Nos. CD-K1 and CD-K2**) at or above the level established during the performance test.
  - i. Once per day, the Permittee shall check and record the limestone feeder setting to verify that it is being maintained at or above the level established during the performance test.
  - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain the limestone feeder setting as provided above.

g. Once per calendar month, the Permittee shall ensure that the limestone feed system on the DLAs (ID Nos. CD-K1 and CD-K2) replaces limestone at least as frequently as the schedule set during the performance test. The record of the monthly check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

- h. The Permittee shall monitor the bypass damper position for the DLAs (**ID Nos. CD-K1 and CD-K2**) at the brick tunnel kilns (**ID Nos. K-1 and K-2**) as follows:
  - i. The Permittee shall secure the bypass damper in a closed and locked position.
  - ii. The Permittee shall conduct a visual inspection of the bypass damper once per day to ensure that the damper is maintained in a closed and locked position.
  - iii. If the lock has been broken or if the damper position has changed, except for periods of routine maintenance as specified in Section 2.1 A.4.h below, the Permittee shall monitor and record the bypass damper position at least every 15 minutes for the DLAs (ID Nos. CD-K1 and CD-K2) until the bypass damper has been returned to a closed and locked position.
  - iv. The Permittee shall record the total time the kilns were operated in bypass mode.
  - v. The record 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 Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met.

- i. The Permittee shall maintain a record of each period when the brick tunnel kilns (**ID Nos. K-1 and K-2**) are operated while bypassing the DLAs (**ID Nos. CD-K1 and CD-K2**) in order to perform routine maintenance. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
  - i. The start date and start time of the routine maintenance;
  - ii. The stop date and stop time of the routine maintenance;
  - iii. A description of the maintenance activities; and,
  - iv. The total time the kilns have operated in bypass mode during periods of routine maintenance.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

- j. The Permittee shall maintain a record of each period when the brick tunnel kilns (**ID Nos. K-1 and K-2**) are operated without the DLAs (**ID Nos. CD-K1 and CD-K2**) during periods of startup, shutdown, or malfunction (SSM). The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
  - i. The start date and start time of the SSM event;
  - ii. The stop date and stop time of the SSM event; and
  - iii. The total time the kilns have operated without the DLAs during the SSM event.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

- k. The Permittee shall maintain records of the production rates on a fired-product basis and HAP emissions for each brick tunnel kiln (**ID Nos. K-1 and K-2**). The Permittee shall maintain monthly records as follows:
  - i. The Permittee shall record the quantity of bricks produced from each brick tunnel kiln each month and for the 12-month period ending on that month.
  - ii. The Permittee shall determine the total time the kilns were operated in bypass mode each month and for the 12month period ending on that month.
  - iii. The Permittee shall calculate HAP emissions in pounds each month and for the 12-month period ending on that month. Emission calculations of HF and HCl shall be made for both uncontrolled (i.e., when the kilns are operated in bypass mode or when the DLAs (ID Nos. CD-K1 and CD-K2) are not in operation) and controlled operation scenarios (i.e., when the kilns are operated with the DLAs in operation). Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

 $E_{HF} = Q_B \times EF_{HF}$ 

 $E_{HCl} = Q_B \times EF_{HCl}$ 

 $E_{HAP} = E_{HF} + E_{HCl}$ 

Where:

- $E_{HF}$  = total actual emissions of HF in pounds
- $E_{HCl} =$  total actual emissions of HCl in pounds
- $E_{HAP}$  = total actual HAP emissions in pounds

- $Q_B =$  pounds of brick fired during the month
- $EF_{HF} = 190$  pounds HF emitted per ton of brick fired (uncontrolled scenario) 4.81 × 10<sup>-3</sup> pounds HF emitted per ton of brick fired (controlled scenario)
- $EF_{HCl} = 54$  pounds of HCl emitted per ton of brick fired (uncontrolled scenario) 6.04 × 10<sup>-3</sup> pounds of HF emitted per ton of brick fired (controlled scenario)
- iv. Until the performance test required in Section 2.1 A.4.b above is conducted and the test results are approved by DAQ, the Permittee shall use the emissions factors for HF and HCl in Section 2.1 A.4.k.iii above to calculate the required HAP emissions. After conducting the performance test required in Section 2.1 A.4.b above, the Permittee shall submit a permit application to DAQ, pursuant to 15A NCAC 02Q .0515 "Minor Permit Modifications" to revise the emissions factors for HF and HCl specified in Section 2.1 A.4.k.iii above, before they can be used in emissions calculations.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the brick production or the HAP emissions are not calculated, the records are not maintained, or the permit application is not submitted.

- 1. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.4.b through 1 above 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 report shall shall summarize emissions of hazardous air pollutants containing the following:
  - i. greatest quantity in pounds of an individual hazardous air pollutant emitted:
    - (A) for each month during the semiannual period, and
    - (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total;
  - ii. pounds of all hazardous air pollutants emitted:
    - (A) for each month during the semiannual period, and
    - (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total.
  - iii. All instances of deviations from the requirements of this permit must be clearly identified.

#### B. One natural gas-fired Rotary Coatings Dryer (ID No. SD-1)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	10% opacity	15A NCAC 02D .0524 (40 CFR Part 60, Subpart UUU
Particulate Matter	0.057 grams per dry standard cubic meter	15A NCAC 02D .0524 (40 CFR Part 60, Subpart UUU
Odors	State-enforceable only See Section 2.2 A.1	15A NCAC 02D .1806

#### 1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

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.

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

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

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

## 2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60, SUBPART UUU)

 a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart UUU "Standards of Performance for Calciners and Dryers in Mineral Industries", including Subpart A "General Provisions."

#### Emission Standards [15A NCAC 02D .0524, 40 CFR 60.732, 40 CFR 60.11]

- b. The Permittee shall comply with the following emission standards during all periods of operation except during periods of startup, shutdown, malfunction.
- c. No emissions shall be discharged into the atmosphere from any affected facility (ID No. SD-1) that:
  - i. Contain particulate matter in excess of 0.057 grams per dry standard cubic meter (g/dscm) (0.025 grains per dry standard cubic foot (gr/dscf)) for dryers; and;
  - ii. Exhibit greater than 10 percent opacity.
- d. 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.

#### Testing [15A NCAC 02Q .0508(f), 40 CFR 60.736]

- e. The following testing requirements apply.
  - i. The Permittee completed the initial compliance demonstration on January 17, 2007 (test reference number 2007-016ST).

- ii. If additional emissions testing is required, the testing shall be performed in accordance with 40 CFR Part 60.736.
- iii. 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, Appendicies A-1 through A-7 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b)
- iv. In determining compliance with the emission standards in Section 2.1 D.2.c, the Permittee shall determine compliance as follows:
  - (A) 40 CFR Part 60, Appendix A-4, 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 dry standard cubic meter (dscm).
  - (B) 40 CFR Part 60, Appendix A-4, Method 9 or Appendix A-7, Method 22 and the procedures in 40 CFR 60.11 shall be used to determine opacity from source emissions.
- v. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with either Method 9 or Method 22. 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).

If the results of any test are above the limits given in Section 2.1 D.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- f. To ensure compliance with the opacity limit in Section 2.1 B.2.b, the Permittee shall observe, on a daily basis, emissions from the rotary coatings dryer (**ID No. SD-1**) for any visible emissions above normal. Should visible emissions be observed to be above normal for an affected facility, the Permittee shall conduct either a Method 9 or Method 22 emission test per Sections 2.1 B.2.e.v in order to demonstrate compliance with the applicable limit in Section 2.1 B.2.c.ii. If the Permittee does not conduct the visible emission monitoring and/or the result of any visible emission monitoring is greater than the limit in Section 2.1 D.2.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. To ensure compliance with the particulate matter emission limit in Section 2.1 B.2.c.i, the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for the rotary coatings dryer (**ID No. SD-1**). As a minimum, the inspection and maintenance requirement shall include a semi-annual internal inspection of the units that comprise the rotary coatings dryer for deterioration, damage, and leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the units that comprise the rotary sand dryer are not inspected and maintained.

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

- h. The results of all monitoring observations, inspections, and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of any observation or inspection;
  - iii. the results of any maintenance performed on the rotary coatings dryer; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.
- i. 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. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

- j. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.2.e through h above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- k. 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.

- 1. 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. One NSPS Subpart OOO-affected primary crushing plant consisting of:

- Two scalp screens (ID Nos. PC-3 and PC-4);
- Two jaw crushers (ID Nos. PC-5 and PC-6);
- One conveyor under PC-3 and PC-5 (ID No. PC-7);
- One conveyor under PC-4 and PC-6 (ID No. PC-8);
- One cross-over conveyor (ID No. PC-9); and
- One shuttle conveyor (ID No. PC-10)

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	10 percent opacity (screening operation and belt conveyors)	15A NCAC 02D .0524
	15 percent opacity (jaw crushers)	40 CFR Part 60
	7 percent opacity (shuttle conveyor)	Subpart OOO
Odors	State-enforceable only	15A NCAC 02D .1806
	See Section 2.2 A.1 - Odorous emissions must be controlled	

#### 1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart OOO)

 a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants", including Subpart A "General Provisions."

Emission Standards [15A NCAC 02D .0524, 40 CFR 60.672, Table 3 to Subpart OOO]

- b. The following fugitive visible emission standards apply:
  - i. For the screening operation and belt conveyors (**ID** Nos. PC-3, 4, 7, 8, and 9), the Permittee shall limit fugitive emissions to ten percent opacity from each individual affected facility.
  - ii. For the jaw crushers (**ID Nos. PC-5 and 6**), the Permittee shall limit fugitive emissions to fifteen percent opacity.
  - iii. For the shuttle conveyor (**ID No. PC-10**), the Permittee shall limit fugitive visible emissions from building openings (except for vents as defined in 40 CFR60.671) to seven percent opacity.
- c. The opacity standards set forth in Section 2.1 C.1.b shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 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. [40 CFR 60.11(d)]

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

- e. The following testing requirements apply:
  - i. If emission testing is required, it shall be in accordance with the requirements of 40 CFR Part 60 Subpart OOO.
  - ii. In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in appendices A-1 through A-7 of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.675, except as provided in 40 CFR 60.8(b).

If the Permittee does not perform any required testing and/or if the results of any testing exceed the emission limit in Section 2.1 C.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

#### Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.674]

f. To ensure compliance with the particulate and visible emission limits in Section 2.1 C.1.b, the Permittee shall, on a monthly basis, observe each affected facility for any visible emissions above normal. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall perform a Method 9 test or a

Method 22 test, as applicable, that meets all requirements of 40 CFR Part 60, Subpart OOO. If the Permittee does not conduct the monthly visible emission observations and/or the result of any visible emission monitoring is greater than the limit in Section 2.1 C.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

g. In the event "normal visible emissions" must be reestablished, the Permittee shall establish normal visible emissions by observing each week for 30 days the emissions from each enclosed affected facility or the building openings.

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

- h. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
  - i. the observations to establish normal for each affected facility;
  - ii. the results of the Permittee's observations to establish normal;
  - iii. the results of the Permittee's monthly opacity emissions observations for each affected facility;
  - iv. the date and time of each observation, and
  - v. if any emissions were observed which exceeded "normal", the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
  - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from reoccurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. if these records are not maintained.

- i. The Permittee shall submit a written summary report of the monitoring and recordkeeping activities given in Sections 2.1 C.1.f through h above postmarked on or before January 30 of each calendar year for the preceding sixmonth 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. In addition, the report shall include:
  - i. a report of any changes in existing facilities as specified in 40 CFR 60.676, including equipment being replaced and the replacement equipment of affected facilities.
  - ii. a report of any noncomplying emissions for all emissions which exceed the applicable opacity limit(s) in Section 2.1 C.1.b using Method 9 or Method 22 compliance demonstrations conducted on an affected facility, along with the determined cause of exceedance and the resulting corrective action taken.

#### D. One NSPS Subpart OOO-affected clay grinding plant consisting of:

- One conveyor belt to scalping screen (ID No. CG-2);
- One scalping screen (ID No. CG-3);
- One return conveyor belt for oversize from screens (ID No. CG-4);
- One conveyor belt to hammer mill (ID No. CG-5);
- One hammer mill (ID No. CG-6);
- One conveyor belt under hammer mill (ID No. CG-7);
- One conveyor belt to finish screens (ID No. CG-8);
- Four finish screens (ID Nos. CG-10, CG-11, CG-12, and CG-13);
- One fines conveyor belt under screens (ID No. CG-14);
- One conveyor belt to storage bins (ID No. CG-15);
- One conveyor belt over storage bins (ID No. CG-16);
- Five storage bins (ID Nos. CG-17, CG-18, CG-19, CG-20, and CG-21);
- Five feeders under storage bins (ID Nos. CG-22, CG-23, CG-24, CG-25, and CG-26);
- One conveyor in front of storage bins (ID No. CG-27); and
- One conveyor to pug mill (ID No. CG-28);

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	7 percent opacity from the building openings enclosing the affected	15A NCAC 02D .0524
	facilities	40 CFR Part 60
		Subpart OOO
Odors	State-enforceable only	15A NCAC 02D .1806
	See Section 2.2 A.1	

## 1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart OOO)

 a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants", including Subpart A "General Provisions."

Emission Standard(s) [15A NCAC 02D .0524, 40 CFR 60.672, Table 3 to Subpart OOO]

- b. The Permittee shall limit fugitive visible emissions from building openings (except for vents as defined in 40 CFR 60.671) to less than seven percent opacity.
- c. The opacity standards set forth in this Section 2.1 D.1.b shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 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. [40 CFR 60.11(d)]

- e. The following testing requirements apply:
  - i. If emission testing is required, it shall be in accordance with the requirements of 40 CFR Part 60 Subpart OOO and General Condition JJ.

ii. In conducting the performance tests required by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in appendices A-1 through A-7 of 40 CFR Part 60, or other methods and procedures as specified in 40 CFR 60.675, except as provided in 40 CFR 60.8(b).

If the Permittee does not perform any required testing and/or if the results of any testing exceed the emission limit in Section 2.1 D.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

#### Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.674]

- f. To ensure compliance with the particulate and visible emission limits in Section 2.1 D.1.b, the Permittee shall, on a monthly basis, observe each affected facility for any visible emissions above normal. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall perform a Method 9 test or a Method 22 test, as applicable, that meets all requirements of 40 CFR Part 60, Subpart OOO. If the Permittee does not conduct the monthly observations and/or if the result of any observation is greater than the respective limit in Section 2.1 D.1.b., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. In the event "normal visible emissions" must be reestablished, the Permittee shall establish normal visible emissions by observing each week for 30 days the emissions from each enclosed affected facility or the building openings.
- h. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
  - i. the observations to establish normal for each affected facility;
  - ii. the results of the Permittee's observations to establish normal;
  - iii. the results of the Permittee's monthly opacity emissions observations for each affected facility;
  - iv. the date and time of each observation, and
  - v. if any emissions were observed which exceeded "normal", the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
  - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from reoccurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. if these records are not maintained.

- i. The Permittee shall submit a written summary report of the all monitoring and recordkeeping activities given in Sections 2.1 D.1.f through h above postmarked on or before January 30 of each calendar year for the preceding sixmonth period between July and December and July 30 of each calendar year for the preceding sixmonth period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. In addition, the report shall include::
  - i. a report of any changes in existing facilities as specified in 40 CFR 60.676, including equipment being replaced and the replacement equipment of affected facilities.
  - ii. a report of any noncomplying emissions for all emissions which exceed the "limit in Section 2.1 D.1.b using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

#### E. One loam/sawdust preparation area consisting of:

- One conveyor from loam/ sawdust feeder to finish screens (ID No. LS-2);
- One loam screen (ID No. LS-3);
- One loam crusher (ID No. LS-4);
- One oversize return conveyor from LS-3 (ID No. LS-5);
- One oversize return chute (ID No. LS-6);
- One fines conveyor belt under LS-3 to bunker belt conveyor (ID No. LS-7);
- One belt conveyor to bunker (ID No. LS-8);
- One storage bunker (ID No. LS-9);
- One sawdust screen (ID No. LS-10);
- One conveyor to storage bins (ID No. LS-11); and
- One oversize conveyor from sawdust screen (ID No. LS-12);

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	7 percent opacity from the building openings enclosing the	15A NCAC 02D .0524
	affected facilities	(40 CFR 60 Subpart OOO)
Odors	State enforceable only	15A NCAC 02D .1806
	See Section 2.2 A.1	
Toxic Air Pollutants	State enforceable only	15A NCAC 02D .1100
	See Section 2.2 A.2	
	State enforceable only	15A NCAC 02Q .0711
	See Section 2.2 A.3	

The following provides a summary of limits and/or standards for the emission source(s) described above.

## 1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart OOO)

 a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants", including Subpart A "General Provisions."

#### Emission Standard(s) [15A NCAC 02D .0524, 40 CFR 60.672, Table 3 to Subpart OOO]

- b. The Permittee shall limit fugitive visible emissions from building openings (except for vents as defined in 40 CFR 60.671) to less than seven percent opacity.
- c. The opacity standards set forth in Section 2.1 E.1.b. shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 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. [40 CFR 60.11(d)]

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

- e. The following testing requirements apply:
  - i. If emission testing is required, it shall be in accordance with the requirements of 40 CFR Part 60 Subpart OOO.
    - ii. In conducting the performance tests required by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in appendices A-1 through A-7 of 40 CFR Part 60, or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

If the Permittee does not perform any required testing and/or if the results of any testing exceed the emission limit in Section 2.1 E.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

#### Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.674]

- f. To ensure compliance with the particulate and visible emission limits in Section 2.1 E.1.b, the Permittee shall, on a monthly basis, observe each affected facility for any visible emissions above normal. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall perform a Method 9 test or a Method 22 test, as applicable, that meets all requirements of 40 CFR Part 60, Subpart OOO. If the Permittee does not conduct the monthly observations and/or if the result of any observation is greater than the respective limit in Section 2.1 E.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. In the event "normal visible emissions" must be reestablished, the Permittee shall establish normal visible emissions by observing each week for 30 days the emissions from each enclosed affected facility or the building openings.

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

- h. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
  - i. the observations to establish normal for each affected facility;
  - ii. the results of the Permittee's observations to establish normal;
  - iii. the results of the Permittee's monthly opacity emissions observations for each affected facility;
  - iv. the date and time of each observation, and
  - v. if any emissions were observed which exceeded "normal", the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
  - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from reoccurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. if these records are not maintained.

- i. The Permittee shall submit a written summary report of the monitoring and recordkeeping activities given in Sections 2.1 E.1.f through h above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The summary report shall also include:
  - i. a report of any changes in existing facilities as specified in 40 CFR 60.676, including equipment being replaced and the replacement equipment of affected facilities.
  - ii. a report of any noncomplying emissions for all emissions which exceed the limit in Section 2.1 E.1.b using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

#### F. One NSPS Subpart OOO-affected secondary clay grinding plant consisting of:

- One conveyor belt to scalping screen (ID No. CG-30);
- One scalping screen (ID No. CG-31);
- One return conveyor belt for oversize from screens (ID No. CG-32);
- One conveyor belt to hammer mill (ID No. CG-33);
- One hammer mill (ID No. CG-34);
- One conveyor belt under hammer mill (ID No. CG-35);
- One conveyor belt to finish screens (ID No. CG-36);
- Four finish screens (ID Nos. CG-37, CG-38, CG-39, and CG-40);
- One fines conveyor belt under screens (ID No. CG-41);
- One conveyor belt to storage bins (ID No. CG-42);
- One conveyor belt over storage bins (ID No. CG-43);
- Five storage bins (ID Nos. CG-44, CG-45, CG-46, CG-47, and CG-48)
- Five feeders under storage bins (ID Nos. CG-49, CG-50, CG-51, CG-52, and CG-53);
- One conveyor in front of storage bins (ID No. CG-54); and
- One conveyor to pug mill (ID No. CG-55);

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	7 percent opacity	15A NCAC 02D .0524 40 CFR Part 60 Subpart OOO
Odors	<b>State-enforceable only</b> See Section 2.2 A.1 - Odorous emissions must be controlled	15A NCAC 02D .1806

#### 1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

 a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants", including Subpart A "General Provisions."

Emission Standard(s) [15A NCAC 02D .0524, 40 CFR 60.672, Table 3 to Subpart OOO]

- b. The Permittee shall limit fugitive visible emissions from building openings (except for vents as defined in 40 CFR 60.671) to less than seven percent opacity.
- c. The opacity standards set forth in Section 2.1 F.1.b shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 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. [40 CFR 60.11(d)]

- e. The following testing requirements apply:
  - i. If emission testing is required, it shall be in accordance with the requirements of 40 CFR Part 60 Subpart OOO.

ii. In conducting the performance tests required by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in appendices A-1 through A-7 of 40 CFR Part 60, or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

If the Permittee does not perform any required testing and/or if the results of any testing exceed the emission limit in Section 2.1 F.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

#### Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.674]

- f. To ensure compliance with the particulate and visible emission limits in Section 2.1 F.1.b, the Permittee shall, on a monthly basis, observe each affected facility for any visible emissions above normal. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall perform a Method 9 test or a Method 22 test, as applicable, that meets all requirements of 40 CFR Part 60, Subpart OOO. If the Permittee does not conduct the periodic observations and/or if the result of any observation is greater than the respective limit in Section 2.1 F.1.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. In the event "normal visible emissions" must be reestablished, the Permittee shall establish normal visible emissions by observing each week for 30 days the emissions from each enclosed affected facility or the building openings.

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

- h. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
  - i. the observations to establish normal for each affected facility;
  - ii. the results of the Permittee's observations to establish normal;
  - iii. the results of the Permittee's monthly opacity emissions observations for each affected facility;
  - iv. the date and time of each observation, and
  - v. if any emissions were observed which exceeded "normal", the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
  - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from reoccurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. if these records are not maintained.

- i. The Permittee shall submit a written summary report of the all monitoring and recordkeeping activities given in Sections 2.1 F.1.f through h above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. In addition, the summary report shall include:
  - i. a report of any changes in existing facilities as specified in 40 CFR 60.676, including equipment being replaced and the replacement equipment of affected facilities.
  - ii. a report of any noncomplying emissions for all emissions which exceed the emission limits in Section 2.1 F.1.b using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

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

#### A. Facility-wide affected sources

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

Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only	15A NCAC 02D .1806
	Odorous emissions must be controlled	
Toxic Air Pollutants	State-enforceable only	15A NCAC 02Q .0711
	Toxic air pollutant emissions shall not exceed the levels listed	
	in 02Q .0711 unless ambient standards are not exceeded	
	State-enforceable only	15A NCAC 02D .1100
	Toxic air pollutant emissions shall not exceed their modeled	
	acceptable ambient levels	

#### State-Enforceable Only

#### 1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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.

#### State-Enforceable Only 2. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. In accordance with the approved application for an air toxic compliance demonstration (approved September 8, 2004), the following permit limits shall not be exceeded:

EMISSION SOURCE	TOXIC AIR POLLUTANT	EMISSION LIMIT
Two Brick Tunnel Kilns (ID Nos. K-1 and K-2)	Arsenic and inorganic arsenic compounds	14.8 pounds per year (annual)
	Benzene	1470 pounds per year (annual)
	Benzo(a)pyrene (POM)	17.5 pounds per year (annual)
	Beryllium	2.09 pounds per year (annual)
	bioavailable chromate pigments, as Chromium VI equivalent	2.25 pounds per year (annual)
	Cadmium	11.2 pounds per year (annual)
	Chlorine	1.81 pounds per day (24-hour)
	Hydrogen Chloride	9.16 pounds per hour
	Hydrogen Fluoride	144 pounds per day (24-hour) 6.0 pounds per hour
	Mercury aryl and inorganic compounds	0.020 pounds per day (24-hour)
	Nickel metal	0.475 pounds per day (24-hour)

#### Monitoring/Recordkeeping [15A NCAC 02D .0611]

b. To ensure compliance with the above limits, the following restrictions shall apply:

- i. The brick tunnel kiln (ID No. K-1) shall be limited to 58,000 pounds of clay brick and additives per hour. These limits were based on the on-site emission test results of 0.26 pounds HCl per ton of clay bricks and additives and 0.15 pounds of HF per ton of clay bricks and additives for brick tunnel kiln (ID No. K-1).
- ii. The brick tunnel kiln (ID No. K-2) shall be limited to 58,000 pounds of clay brick and additives per hour. These limits were based on the emission standards for HCl (0.056 pounds of HCl per ton of fired product) and HF (0.057 pounds of HF per ton of fired product).
- c. The Permittee shall maintain records of production rates, throughputs, material usages, and/or other process operational information. The records shall be maintained for a minimum of three years from the date of recording.
- d. The DAQ reserves the right to require in the future that the Permittee perform periodic sampling and analysis of clay and shales used at the facility for determination of hydrogen fluoride concentration.
- e. The Permittee shall notify the Regional Supervisor, Division of Air Quality, within 30 days of initial start-up of the use of any clay used at the facility for determination of hydrogen fluoride concentration.
- f. The Permittee shall notify the Regional Supervisor, Division of Air Quality, within 30 days of initial start-up of the use of any clay or shales received from the new source (supplier), and provide the analytical results of hydrogen fluoride concentration within 30 days of such date.

#### Reporting [15A NCAC 02D .0611]

g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 A.2.b through f above 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 report shall state the maximum amount of materials (clay brick and additives) processed per hour through the respective brick tunnel kilns during the previous semiannual period.

#### **State-Enforceable Only**

#### 3. 15A NCAC 02Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS

- a. For each of the toxic air pollutants (TAPs) listed below, the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711(a). 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 02Q .0711(a).
  - 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. <u>PRIOR</u> 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 02D .1100 "Control of Toxic Air Pollutants".
  - iii. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

	TPERs Limitations			
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
carbon disulfide (75-15-0)		3.9		
p-dichlorobenzene (106-46-7)				16.8
fluorides		0.34	0.064	
formaldehyde (50-00-0)				0.04
manganese and compounds		0.63		
1,1,1 trichloroethane (methyl chloroform) (71-55-6)		250		64
methyl ethyl ketone (78-93-3)		78		22.4
methyl isobutyl ketone (108-10-1)		52		7.6
perchloroethylene (127-18-4)	13,000			
phenol (108-95-2)			0.24	

	TPERs Limitations			
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
styrene (100-42-5)			2.7	
toluene (108-88-3)		98		14.4
xylene (1330-20-7)		57		16.4

#### B. One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired Brick Tunnel Kiln (ID No. K-1)

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

Pollutant Limits/Standards		Applicable Regulation
Sulfur Dioxide	Less than 250 tons per year	15A NCAC 02Q .0317
		PSD Avoidance

#### 1. 15A NCAC 02Q .0317: AVOIDANCE CONDITION for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the natural gas/ No. 2 fuel oil-fired/ No. 6 fuel oil-fired brick tunnel kiln (**ID No. K-1**) shall discharge into the atmosphere less than 250 tons of sulfur dioxide total, per consecutive 12-month period.
- b. To ensure emissions do not exceed the limitation above, the following restrictions shall apply:
  - i. The amount of No. 6 fuel oil burned shall be limited to 920,000 gallons per year, and the sulfur content of the No. 6 fuel oil shall not exceed 2.1 percent by weight while using No. 6 fuel oil in the non-preheat section of the kiln and No. 2 fuel oil in the preheat section of the kiln; otherwise, if a combination of fuels is used in the kiln, then the sulfur dioxide emissions shall be calculated using the formula in Section 2.2 B.1.e below.
  - ii. The brick tunnel kiln (ID No. K-1) shall be limited to a production rate of 58,000 pounds per hour.

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

c. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 B.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- d. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
  - i. the name of the fuel oil supplier;
  - ii. the maximum sulfur content of the No. 6 fuel oil received during the quarter;
  - iii. the method used to determine the maximum sulfur content of the No. 6 fuel oil; and
  - iv. 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 02D .0530 if the sulfur content and the amount of the fuel is not monitored.

e. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E_{SO2} = (EF_B \times Q_B) + (EF_{No2} \times Q_{No2} \times S_1) + (EF_{No6} \times Q_{No6} \times S_2) + (EF_{NG} \times Q_{NG})$$

Where:

Eso <sub>2</sub>	=	Total actual emissions of sulfur dioxide, in pounds
$EF_B$	=	0.3 pounds of SO <sub>2</sub> emitted per ton of brick fired
$Q_B$	=	tons of brick fired per month
$EF_{No2}$	=	0.142 pounds of $SO_2$ emitted per gallon of No. 2 oil fired
$Q_{No2}$	=	gallons of No. 2 oil fired per month
$S_1$	=	Sulfur content of the No. 2 fuel oil (if the oil is 0.5% sulfur by weight, $S_1 = 0.5$ )
$EF_{No6}$	=	0.157 pounds of SO <sub>2</sub> emitted per gallon of No. 6 oil fired
$Q_{No6}$	=	gallons of No. 6 oil fired per month
$S_2$	=	Sulfur content of the No. 6 fuel oil
$E_{NG}$	=	0.6 pounds of SO <sub>2</sub> emitted per million standard cubic feet of natural gas fired
$Q_{NG}$	=	million standard cubic feet of natural gas fired per month

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.2 B.1.a.

- f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 B.1.d and e above 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 report shall contain the following:
  - i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. The monthly quantities of natural gas, No. 2 fuel oil and No. 6 fuel oil consumed for the previous 17 months.

#### C. One natural gas/No. 2 fuel oil/No. 6 fuel oil-fired Brick Tunnel Kiln (ID No. K-2)

The following table provides a summary of minits and standards for the emission source(s) described above.				
Pollutant	Limits/Standards	Applicable Regulation		
Sulfur Dioxide	Less than 250 tons per year	15A NCAC 02Q .0317 PSD Avoidance of		

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

#### 1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the natural gas/ No. 2 fuel oil-fired/ No. 6 fuel oil-fired brick tunnel kiln (**ID No. K-2**) shall discharge into the atmosphere less than 250 tons of sulfur dioxide total, per consecutive 12-month period.

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 C.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

- c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel is not monitored.
- d. The sulfur dioxide emissions from kiln (**ID No. K-2**) shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$E_{SO2} = (EF_B \times Q_B) + (EF_{No2} \times Q_{No2} \times S_1) + (EF_{No6} \times Q_{No6} \times S_2) + (EF_{NG} \times Q_{NG})$$

Where:

	•	
Eso <sub>2</sub>	=	Total actual emissions of sulfur dioxide, in pounds
$EF_B$	=	0.3 pounds of $SO_2$ emitted per ton of brick fired
$Q_B$	=	tons of brick fired per month
$EF_{No2}$	=	0.142 pounds of SO <sub>2</sub> emitted per gallon of No. 2 oil fired
$Q_{No2}$	=	gallons of No. 2 oil fired per month
$S_1$	=	Sulfur content of the No. 2 fuel oil (if the oil is 0.5% sulfur by weight, $S_1 = 0.5$ )
$EF_{No6}$	=	0.157 pounds of SO <sub>2</sub> emitted per gallon of No. 6 oil fired
$Q_{No6}$	=	gallons of No. 6 oil fired per month
$S_2$	=	Sulfur content of the No. 6 fuel oil
E <sub>NG</sub>	=	0.6 pounds of SO <sub>2</sub> emitted per million standard cubic feet of natural gas fired
~		

 $Q_{NG}$  = million standard cubic feet of natural gas fired per month

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.2 (C)(1)(a).

- e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 C.1.c and d above 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 report shall contain the following:
  - i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. The monthly quantities of natural gas, No. 2 fuel oil and No. 6 fuel oil consumed for the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

### SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description <sup>1,2</sup>
IS-Tank	3,000 gallon above ground gasoline storage tank
GACT CCCCCC	
IT-1	One 24,000 gallon above ground No. 6 fuel oil storage tank
IT-2 and IT-3	Two 24,000 gallon above ground No. 2 fuel oil storage tanks
IT-4	One 24,000 gallon above ground highway diesel fuel oil storage tank
IT-5	One 24,000 gallon above ground Additive "A" storage tank

<sup>1</sup>Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

<sup>2</sup> When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

### SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

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

#### A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

- 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
- 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 02Q .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(s) 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 Environmental Quality upon request.

#### C. Severability Clause [15A NCAC 02Q .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 02Q .0507(e) and 02Q .0508(i)(16)]

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

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

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

#### E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

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. Permit 08179T12 Page 33

#### F. <u>Circumvention</u> - 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. Title V Permit Modifications

- Administrative Permit Amendments [15A NCAC 02Q .0514] The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505] The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
- 3. Minor Permit Modifications [15A NCAC 02Q .0515] The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- Significant Permit Modifications [15A NCAC 02Q .0516] The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
- Reopening for Cause [15A NCAC 02Q .0517] The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

#### H. Changes Not Requiring Permit Modifications

- Reporting Requirements [15A NCAC 02Q .0508(f)] Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application;
  - b. changes that modify equipment or processes; or
  - c. changes in the quantity or quality of materials processed.

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

- 2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]
  - The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

#### I.A <u>Reporting Requirements for Excess Emissions</u> [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

- <u>"Excess Emissions</u>" 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 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)
- 2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .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 02D .0535(f)(3).

#### I.B <u>Reporting Requirements for Permit Deviations</u> [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

- 1. "<u>Permit Deviations</u>" 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.
- 2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. 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.C Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .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 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .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 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration the permit expiration for facilities subject to 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

#### L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .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 02Q .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 02Q .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. <u>Retention of Records</u> [15A NCAC 02Q .0508(f) and 02Q .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. <u>Compliance Certification</u> [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. 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;
- 4. the method(s) used for determining the compliance status of the source during the certification period;
- 5. each deviation and take it into account in the compliance certification; and
- 6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

#### Q. Certification by Responsible Official [15A NCAC 02Q .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 02Q .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 02Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

#### S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .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 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. 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 02Q .0519.

#### X. Annual Emission Inventory Requirements [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .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 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .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 02Q .0107.

#### Z. Construction and Operation Permits [15A NCAC 02Q .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 02Q .0100 and .0300.

#### AA. Standard Application Form and Required Information [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

#### BB. Financial Responsibility and Compliance History [15A NCAC 02Q .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 02Q .0501(d)]

- 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 02Q .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.

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#### EE. National Emission Standards Asbestos - 40 CFR Part 61, Subpart M [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

#### FF. Title IV Allowances [15A NCAC 02Q .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 02D .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 02D .0300.

#### HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

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 02D .0202(b).

#### II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .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 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.

- ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
- iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

#### KK. Reopening for Cause [15A NCAC 02Q .0517]

- . A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .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 02Q .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 02Q .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. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

#### MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

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

#### NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.

- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
  - a. The written notification shall include:
    - i. a description of the change at the facility;
    - 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.
  - b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

#### OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.