ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

XXXXX XX, 2024

Geoffrey Roberson
Technical Services Director
Pine Hall Brick Co., Inc.
PO Box 836
Madison, NC 27025

SUBJECT: Air Quality Permit No. 03997T30
Facility ID: 7900038
Pine Hall Brick Co., Inc.
Madison, North Carolina
Rockingham County
Fee Class: Title V
PSD Class: Major

Dear Mr. Roberson:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 03997T30 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

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

Rockingham County has triggered increment tracking under PSD for $PM_{2.5}$, PM_{10}, SO_2, and NO_x. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXXXX XX, 2024 until XXXXX XX, 2029, 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 Emily Supple at 919-707-8481 or Emily.supple@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 (7900038)

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 of its decision. If 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 https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case. 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

The following changes were made to Air Permit No. 03997T30:*

Page No.	Section	Description of Changes
Cover and throughout	--	• Updated all dates and permit revision numbers. • Updated to current shell language and formatting
4	Equipment List	• Removed 02D .1109 designations to affected sources • Added MACT JJJJJ designations to affected sources
11	2.1 C.1.c	• Added an annual internal inspection requirement for Plant 4 kilns' bagfilters (ID Nos. 4ES-BF and 4ES-BF2)
22-32	2.2 B.1	• Added MACT Subpart JJJJJ condition
33-44	Insignificant Activities	• Updated insignificant activities table • Added sawdust storage silos (ID Nos. I-4WHS-SILO1 and I-4WHS-SILO2) • Added Plant 3 brickmaking to insignificant activities list and removed this source from the permitted emission sources
45-52	General Conditions	• Updated to the latest version of DAQ shell version 8.0 07/10/2024

* 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
03997T30	03997T29	XXXX XX, 2024	XXXX XX, 2029

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than XXXX XX, 2029 – 6 months.

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:	**Pine Hall Brick Co., Inc.**
Facility ID:	**7900038**
Primary SIC Code:	**3251**
NAICS Code:	**327121**
Facility Site Location:	**634 Lindsey Bridge Road**
City, County, State, Zip:	**Madison, Rockingham County, NC 27025**
Mailing Address:	**PO Box 836**
City, State, Zip:	**Madison, NC 27025**
Application Number(s):	**7900038.22A**
Complete Application Date(s):	**December 22, 2021**
Division of Air Quality, Regional Office Address:	**Winston-Salem Regional Office** **450 West Hanes Mill Road, Suite 300** **Winston-Salem, NC 27105**

Permit issued this the XX day of XXXXX, 2024.

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Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

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
CO	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
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	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
Plant 3			
3VS3.4A and 3VS3.4B **NSPS OOO**	Two Leahy vibrating screens (4 feet by 8 feet, each, 20 tons per hour capacity, each)	N/A	N/A
3VS3.4C and 3VS3.4D **NSPS OOO**	Two Simplicity vibrating screens (4 feet by 10 feet, each, 25 tons per hour capacity, each)	N/A	N/A
3C-32 **NSPS OOO**	One conveyor belt from the primary crusher into the grinding building (36 inches in width)	N/A	N/A
3JC-1 **NSPS OOO**	Primary jaw crusher (32 inch by 42 inch, 250 tons per hour nominal, 342 tons per hour capacity)	N/A	N/A
3ES-LK3.1 and 3ES-LK3.2 **MACT JJJJJ** ES-DRY2	Two natural gas/wood-fired brick kilns (19.8 million Btu per hour heat input, each, 10 tons per hour fired brick capacity, each) with: One brick kiln exhaust gas heated fluidized bed wood (sawdust) drying system (10,000 pounds per hour capacity)	3CY3.1 and 3CY3.2	Two simple cyclones (58 inches in diameter, each)
Plant 4			
4ES-LKD4.1 and 4ES-LKD4.2 **MACT JJJJJ**	Two natural gas/propane/wood-fired combination brick kilns (28.8 million Btu per hour heat input, 13.5 tons per hour fired brick capacity, each) sharing a single stack	4ES-DLA 4ES-BF and 4ES-BF2	One dry lime adsorber Two bagfilters (6,669 square feet of filter area, each)
4ES-BRICKROOM-P	Plant 4 brick packing room air exhaust	4CY-2T.1 and 4CY-2T.2	Two simple cyclones (52 inches in diameter, each, exhausting outdoors)
4ES-BRICKROOM-M	Plant 4 brick making room air exhaust	4CY-2T.3 and 4CY-2T.4 P4-BF	Two simple cyclones (64 inches in diameter, each) One bagfilter (2,443 square feet of filter area)
4-WHS-LKD4.1	Wood dust silo for Plant 4, Kiln 1 (718 cubic feet)	4-WHS-BVF-1	Bin vent filter (328 square feet of filter area)
4-WHS-LKD4.2	Wood dust silo for Plant 4, Kiln 2 (718 cubic feet)	4-WHS-BVF-2	Bin vent filter (328 square feet of filter area)
Plant 5			
5ES-LKD5.1 and 5ES-LKD5.2 **MACT JJJJJ**	Two natural gas-fired/propane combination brick dryer and kiln systems (28.88 million Btu per hour heat input, each, 11.95 tons per hour fired brick capacity, each)	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. Grinding building sources including:

- **two Leahy vibrating screens (ID Nos. 3VS3.4A and 3VS3.4B),**
- **two Simplicity vibrating screens (ID Nos. 3VS3.4C and 3VS3.4D),**
- **one conveyor belt from the primary crusher (ID No. 3C-32), and**
- **one primary jaw crusher (ID No. 3JC-1)**

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	***For affected sources enclosed within a building:*** 5 grams per dry standard cubic meter	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
Visible emissions	***For affected sources not enclosed within a building:*** 10 percent opacity (non-crusher affected sources) 12 percent opacity (crusher-affected sources)	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
Visible emissions	***For affected sources enclosed within a building:*** 7 percent opacity	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. For these emission sources **(ID Nos. 3VS3.4A, 3VS3.4B, 3VS3.4C, 3VS3.4D, 3C-32, and 3JC-1)**, the Permittee shall comply with all applicable provisions, notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants", and Subpart A, "General Provisions".

Emission Standards [40 CFR 603672(b)]

b. For each affected source not enclosed within a building:
   i. For each non-crusher affected source, visible emissions shall be less than 10 percent opacity.
   ii. For each crusher affected source, visible emissions shall be less than 12 percent opacity.

c. For each affected source enclosed within a building:
   i. Visible emissions from the building shall be less than 7 percent opacity, and
   ii. Particulate matter emissions shall be less than 5 grams per dry standard cubic meter.

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

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Sections 2.1 A.1.b and c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

e. For each affected facility, the Permittee shall:
   i. Observe building vents and emission points each month for any visible emissions which exceed normal, and

ii. If visible emissions are observed that exceed normal, the Permittee shall perform a Method 9 opacity determination for each emission point. The Method 9 opacity determination shall meet the requirements of 40 CFR 60.670.

If the Permittee does not perform monthly observations and/or if the result of a Method 9 determination is greater than the emission standards in Sections 2.1 A.1.b or c, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

f. The results of any monitoring activities given in Section 2.1 A.1.e shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action,
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions, and
   iii. The results of any corrective actions performed.

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

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

g. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.1.e and 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.

B. Plant 3 combination brick kiln and wood fuel drying system including:

- **two natural gas/wood-fired brick tunnel kilns (ID Nos. 3ES-LK3.1 and 3ES-LK3.2), and**
- **one brick kiln exhaust gas-heated fluidized bed wood (sawdust) drying system (ID no. ES-DRY2)**

each controlled by two simple cylones (ID Nos. 3CY3.1 and 3CY3.2) operating in parallel.

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E=4.10 \times P^{0.67}$, for process rates ≤ 30 tons per hour, OR $E=55 \times P^{0.11} - 40$, for process rates > 30 tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input **(all sources except ES-DRY2)**	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Carbon monoxide	Less than 250 tons per consecutive 12-month period **See Section 2.2 A.1**	15A NCAC 02Q .0317
Particulate matter, or Non-Hg HAP metals	0.37 pounds per ton of fired product, or 0.0021 grains per dry standard cubic foot at 17% O_2, or 0.11 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Mercury	3.3E-04 pounds per ton of fired product, or 91 micrograms per dry standard cubic foot at 17% O_2, or 0.0019 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Hydrogen chloride equivalent	57 pounds per hour, total for all kilns at facility **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (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 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 B.1.a above, the Permittee shall be deemed in

noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from these sources **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** shall be controlled by one simple cyclone or two parallel simple cyclones **(ID Nos. 3CY3.1 and 3CY3.2)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks;
   ii. an annual (for each 12-month period following the initial inspection) external inspection of the cyclone's structural integrity; and
   iii. every six months, a visual inspection of the fuel combustion systems.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

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

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.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 these sources **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** 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 B.2.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/reporting is required for sulfur dioxide emissions from the firing of natural gas or wood in these sources **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)**.

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

a. Visible emissions from these sources **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, and ES-DRY2)** 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 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 B.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. 3ES-LK3.1, 3ES-LK3.2, and ES-DRY2)** 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 B.3.a 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 noncompliance with 15A NCAC 02D .0521 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 B.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.

C. Plant 4 equipment including:

- **two natural gas/propane/wood-fired brick tunnel kilns (ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2) sharing a single stack**

controlled by one dry limestone adsorber (ID No. 4ES-DLA) in series with two bagfilters* (ID Nos. 4ES-BF and 4ES-BF2)

***Bagfilters operated as follows:**

1) **Both bagfilters with both kilns,**
2) **One Bagfilter with one kiln, and**
3) **One bagfilter with both kilns if pressure drop across bagfilter is no greater than 14 inches of water column.**

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E=4.10 \times P^{0.67}$, for process rates ≤ 30 tons per hour, OR $E=55 \times P^{0.11} - 40$, for process rates > 30 tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Carbon monoxide	Less than 250 tons per consecutive 12-month period **See Section 2.2 A.1**	15A NCAC 02Q .0317
Particulate matter, or Non-Hg HAP metals	0.036 pounds per ton of fired product, or 0.0029 grains per dry standard cubic foot at 17% O_2, or 0.0057 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Mercury	4.1E-05 pounds per ton of fired product, or 7.7 micrograms per dry standard cubic foot at 17% O_2, or 5.5E-04 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Hydrogen chloride equivalent	57 pounds per hour, total for all kilns at facility **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (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 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 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall be controlled by one dry lime adsorber and one or both bagfilters **(ID Nos. 4ES-DLA, 4ES-BF, and 4ES-BF2)**. If only one bagfilter is used to control emissions from two kilns, the pressure drop across the bagfilter shall be no more than 14 inches of water column. To ensure compliance, the Permittee shall perform inspections and maintenance on each control device as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks;
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of each bagfilter's structural integrity; and
   iii. every six months, a visual inspection of the fuel combustion systems.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device;
   iv. any variance from manufacturer's recommendations, if any, and corrections made;
   v. the dates when only one bagfilter is used to control emissions from two kilns; and
   vi. during periods when only one bagfilter is used is used to control emissions from two kilns, the pressure drop across the bagfilter, recorded once for each day of this period.

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

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

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 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. 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 these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** 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 D.2.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/reporting is required for sulfur dioxide emissions from the firing of natural gas, propane, or wood in these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)**.

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

a. Visible emissions from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** 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 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 C.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. 4ES-LKD4.1 and 4ES-LKD4.2)** 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 C.3.a 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 noncompliance with 15A NCAC 02D .0521 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 C.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.

D. Plant 4 equipment including:

- **Plant 4 brick packing room air exhaust (ID No. 4ES-BRICKROOM-P)**

controlled by two simple cyclones (ID Nos. 4CY-2T.1 and 4CY-2T.2) operating in parallel, and

- **Plant 4 brick making room air exhaust (ID No. 4ES-BRICKROOM-M)**

controlled by two simple cyclones (ID Nos. 4CY-2T.3 and 4CY-2T.4) operating in parallel, each exhausting to one bagfilter (ID No. P4-BF)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E=4.10 \times P^{0.67}$, for process rates ≤ 30 tons per hour, OR $E=55 \times P^{0.11} - 40$, for process rates > 30 tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. 4ES-BRICKROOM-P and 4ES-BRICKROOM-M)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (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 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 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from the source **(ID No. 4ES-BRICKROOM-P)** shall be controlled by one set of simple cyclones **(ID Nos. 4CY-2T.1 and 4CY-2T.2)**, and the source **(ID No. 4ES-BRICKROOM-M)** shall be controlled by one set of simple cyclones exhausting to one bagfilter **(ID Nos. 4CY-2T.3, 4CY-2T.4, and PF-BF)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. a monthly visual inspection of the system ductwork and material collection unit for leaks;
ii. an annual (for each 12-month period following the initial inspection) external inspection of the cyclone's structural integrity; and
iii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

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

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 D.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 .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID No. 4ES-BRICKROOM-P and 4ES-BRICKROOM-M)** 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 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 D.2.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 week the Permittee shall observe the emission points of these sources **(ID Nos. 4ES-BRICKROOM-P and 4ES-BRICKROOM-M)** for any visible emissions above normal. The weekly observation must be made for each week 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 D.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required weekly 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;
   iii. the results of any corrective actions performed; and

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 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 D.2.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.

E. Plant 4 equipment including:

- **Wood dust silo (ID No. 4-WHS-LKD4.1) associated with Plant 4 Kiln 1**

controlled by one bin vent filter (ID No. 4-WHS-BVF-1), and

- **Wood dust silo (ID No. 4-WHS-LKD4.2) associated with Plant 4 Kiln 2**

controlled by one bin vent filter (ID No. 4-WHS-BVF-2)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	E=4.10 x $P^{0.67}$, for process rates ≤ 30 tons per hour, OR 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	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. 4-WHS-LKD4.1 and 4-WHS-LKD4.2)** shall not exceed an allowable emission rate as calculated by the following equation:

E = 4.10 x $P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
E = 55.0 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 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 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from these sources **(ID Nos. 4-WHS-LKD4.1 and 4-WHS-LKD4.2)** shall be controlled by bagfilters **(ID Nos. 4-WHS-BVF-1 and 4-WHS-BVF-2)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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

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

ii. the results of each inspection;
iii. the results of any maintenance performed on any control device; and
iv. any variance from manufacturer's recommendations, if any, and corrections made.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

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

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 E.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 .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. 4-WHS-LKD4.1 and 4-WHS-LKD4.2)** 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 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 E.2.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 week the Permittee shall observe the emission points of these sources **(ID Nos. 4-WHS-LKD4.1 and 4-WHS-LKD4.2)** for any visible emissions above normal. The weekly observation must be made for each week 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 E.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required weekly 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;
   iii. the results of any corrective actions performed; and

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 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 E.2.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.

F. Plant 5 equipment including:

- **two natural gas/propane-fired combination brick dryer and kiln systems (ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)**

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	E=4.10 x $P^{0.67}$, for process rates ≤ 30 tons per hour, OR 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	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter, or Non-Hg HAP metals	0.036 pounds per ton of fired product, or 0.0029 grains per dry standard cubic foot at 17% O_2, or 0.0057 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Mercury	4.1E-05 pounds per ton of fired product, or 7.7 micrograms per dry standard cubic foot at 17% O_2, or 5.5E-04 pounds per hour **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Hydrogen chloride equivalent	57 pounds per hour, total for all kilns at facility **See Section 2.2 B.1**	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Odors	**State-enforceable only** Odorous emissions must be controlled. **See Section 2.2 B.2**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** shall not exceed an allowable emission rate as calculated by the following equation:

E = 4.10 x $P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
E = 55.0 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 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 F.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 inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork for leaks; and

ii. every six months, a visual inspection of the fuel combustion systems.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.
   The Permittee shall be deemed in noncompliance 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 F.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 these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** 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 F.2.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/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)**.

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

a. Visible emissions from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** 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 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 F.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. 5ES-LKD5.1 and 5ES-LKD5.2)** 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 F.3.a 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 noncompliance with 15A NCAC 02D .0521 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 F.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.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Plant 3 and Plant 4 Equipment

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

Pollutant	Limits/Standards	Applicable Regulation
Carbon monoxide	Less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance

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, these sources **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LKD4.1, and 4ES-LKD4.2)** shall discharge into the atmosphere less than 250 tons of carbon monoxide total, per consecutive 12-month period.

b. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, the production rate of these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall be limited to 232,000 tons per year of fired brick.

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 A.1.a above, 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 bricks produced while firing natural gas and while firing wood (sawdust) in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of bricks produced is not monitored.

e. The monthly brick production shall be limited such that carbon monoxide emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or electronic format), according to the following formula:

$$\mathrm{E} = \frac{(EF_{\mathrm{B1}} \times Q_{\mathrm{B1}}) + (EF_{\mathrm{B2}} \times Q_{\mathrm{B2}})}{2{,}000}$$

Where:

E = Annual CO emissions, in tons per year;

EF_{B1} = Emission factor for brickmaking while firing natural gas, established as **0.85** pounds of CO per ton of brick produced;

Q_{B1} = Bricks produced while firing natural gas, in tons per year;

EF_{B2} = Emission factor for brickmaking while firing wood (sawdust), established as **1.6** pounds of CO per ton of brick produced; and

Q_{B1} = Bricks produced while firing wood (sawdust), in tons per year

f. The Permittee shall keep monthly records on site for a minimum of three years and make them available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the carbon monoxide emissions exceed the limit in Section 2.2 A.1.a. above.

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

g. The Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly brick production while firing natural gas in units of tons for the previous 17 months. The total brick production must be calculated for each of the 12-month periods over the previous 17 months;

ii. The monthly brick production while firing wood (sawdust) in units of tons for the previous 17 months. The total brick production must be calculated for each of the 12-month periods over the previous 17 months;

iii. The total monthly carbon monoxide emissions in units of tons for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
iv. All instances of deviations from the requirements of this permit must be clearly identified.

B. Facility Wide Sources

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY 40 CFR Part 63 Subpart JJJJJ: NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR BRICK AND STRUCTURAL CLAY PRODUCTS MANUFACTURING

Applicability [40 CFR 63.8380, 40 CFR 63.8385, 40 CFR 63.8390(f)]

a. For the existing large tunnel kilns (**ID Nos. 4ES-LK4.1, 4ES-LK4.2, 5ES-LK5.1, and 5ES-LK5.2**) and existing small tunnel kilns **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** located at the brick and structural clay products (BSCP) manufacturing facility, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart JJJJJ, "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing" and Subpart A "General Provisions".

b. The Permittee shall be subject to the requirements of this standard starting December 28, 2023.

Definitions and Nomenclature [40 CFR 63.8515]

c. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.8515 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.8505]

d. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart JJJJJ.

Compliance Date [40 CFR 63. 8435, 63.56(b)]

e. The Permittee shall complete the initial performance test within 180 calendar days after the compliance date that is specified for the existing tunnel kilns **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LK4.1, 4ES-LK4.2, 5ES-LK5.1, and 5ES-LK5.2)**. The Permittee shall comply with the standards of this subpart starting December 28, 2023. Therefore, the Permittee shall complete the initial performance test by no later than June 25, 2024.
   i. For the Plant 3 kilns **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)**, the Permittee shall complete the initial performance test within 180 days of startup of these sources.

Notifications [40 CFR 63.8480]

f. The Permittee shall submit all applicable notifications according to the following:
   i. The Permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply, by the dates specified.
   ii. The Permittee shall submit an Initial Notification not later than 120 calendar days after the Permittee becomes subject to this subpart.
   iii. The Permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin.
   iv. The Permittee shall submit a Notification of Compliance Status including the performance test results no later than 60 calendar days following the completion of a performance test required by Sections 2.2 B.1.r or t.
   v. The Permittee shall submit a Notification of Compliance Status no later than 30 calendar days following the completion of a compliance demonstration that does not include a performance test (i.e. compliance demonstrations for the work practice standards in Section 2.2 B.1.q.
   vi. Each Notification of Compliance Status must include the following information:
      (A) The requirements of 40 CFR 63.9(h)(2)(i); and
      (B) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

General Compliance Requirements [40 CFR 63.8420 and 40 CFR 63.8425]

g. The Permittee shall be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of start-up and shutdown, at which time the Permittee shall comply with the applicable work practice standards specified in Section 2.2 B.1.p.

h. At all times, each affected source, including associated air pollution control equipment and monitoring equipment, must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in

compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. During the period between the compliance date specified for the affected source in Section 2.2 B.1.b and the date upon which continuous monitoring systems (CMS) have been installed and verified and any applicable operating limits have been set, a log must be maintained detailing the operation and maintenance of the process and emissions control equipment.

i. The Permittee shall be in compliance with the work practice standards in Section 2.2 B.1.p at all times.

j. For each affected kiln that is subject to the emission limits specified in Sections 2.2 B.1.n.i. through vii, the Permittee shall prepare, implement, and revise as necessary an operation, maintenance, and monitoring (OM&M) plan according to the specifications in Sections 2.2 B.1.k through m. The OM&M plan shall be available for inspection by the delegated authority upon request.

k. OM&M Plan. The OM&M plan must include, as a minimum, the following information:
   i. Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
   ii. A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
   iii. The limits for each parameter that represent continuous compliance with the emission limitations in Sections 2.2 B.1.n.i. through vii. The limits must be based on values of the monitored parameters recorded during performance tests.
   iv. Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.
   v. Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions.
   vi. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.
   vii. Continuous monitoring system performance evaluation procedures and acceptance criteria.
   viii. Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in Sections 2.2 B.1.bb through dd, and 40 CFR 63.8(c)(1), (3), (7), and (8).
   ix. Continuous monitoring system data quality assurance procedures consistent with the requirements in 40 CFR 63.8(d)(1) and (2). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan in 40 CFR 63.8(d)(2) is revised, the owner or operator shall keep previous versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2).
   x. Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in Sections 2.2 B.1.oo through zz.
   xi. Procedures for responding to operating parameter deviations, including the following procedures:
      (A) Procedures for determining the cause of the operating parameter deviation.
      (B) Actions necessary for correcting the deviation and returning the operating parameters to the allowable limits.
      (C) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.
   xii. Procedures for keeping records to document compliance.

l. Changes to the operating limits in the OM&M plan require a new performance test. The revision of an operating limit parameter value shall meet the following requirements:
   i. A notification of performance test must be submitted to the Administrator as specified in 40 CFR 63.7(b).
   ii. After completion of the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, the performance test results and the revised operating limits must be submitted as part of the Notification of Compliance Status required under 40 CFR 63.9(h).

   A new performance test is not required for the revision of the inspection and maintenance procedures in the OM&M plan.

m. For a kiln that is subject to the emission limits specified in Section 2.2 B.1.n and has a control device which requires routine maintenance, the Permittee may bypass the kiln control device and continue operating the kiln subject to the alternative standard established in Section 2.2 B.1.m.i through v upon approval by the Administrator and provided the following conditions are satisfied:
   i. The Permittee shall request to use the routine control device maintenance alternative standard from the Administrator no later than 120 calendar days before the compliance date specified in Section 2.2 B.1.e. The request must justify the need for routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities,

explain why the maintenance cannot be accomplished during kiln shutdowns, provide information stating whether the continued operation of the affected source will result in fewer emissions than shutting the source down while the maintenance is performed, describe how the facility will comply with Section 2.2 B.1.h during the maintenance, and provide any other documentation required by the Administrator.

ii. The routine control device maintenance must not exceed 4 percent of the annual operating uptime for each kiln.

iii. The request for routine control device maintenance alternative standard, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's Title V permit.

iv. The Permittee shall minimize HAP emissions during the period when the kiln is operating and the control device is offline by complying with the applicable standard in Table 3 to this subpart.

v. The Permittee shall minimize the time period during which the kiln is operating and the control device is offline.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the general compliance requirements in Section 2.2 B.1.g through m are not met.

Emission Limitations, Operating Limits, and Work Practice Standards [40 CFR 63.8405 and 40 CFR 63.8410]

n. The Permittee shall meet each emission limit that applies for the large existing tunnel kilns **(ID Nos. 4ES-LK4.1, 4ES-LK4.2, 5ES-LK5.1, and 5ES-LK5.2)** and small existing tunnel kilns **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)**, including all process streams, as follows:

Collection of all tunnel kilns, including Plants 3, 4, and 5 kilns:

i. HF, HCl, and Cl_2 emissions must not exceed 57 pounds per hour, HCl-equivalent, under the health-based standard, as determined using Equations 2 and 3 given in Section 2.2 B.1.y.ii.(1) and Section 2.2 B.1.z.i below.

Existing large tunnel kilns, including Plants 4 and 5 kilns:

ii. PM emissions must not exceed 0.036 pounds per ton of fired product; or

iii. PM emissions must not exceed 6.6 milligrams per dry standard cubic foot at 17% O_2; or

iv. Non-Hg HAP metals emissions must not exceed 0.0057 pounds per hour.

v. Hg emissions must not exceed 4.1 E-05 pounds per ton of fired product; or

vi. Hg emissions must not exceed 7.7 micrograms per dry standard cubic meter at 17% O_2; or

vii. Hg emissions must not exceed 5.5 E-04 pounds per hour.

Existing small tunnel kilns, including Plant 3 kilns:

viii. PM emissions must not exceed 0.37 pounds per ton of fired product; or

ix. PM emissions must not exceed 0.0021 grains per dry standard cubic foot at 17% O_2; or

x. Non-Hg HAP metals emissions must not exceed 0.11 pounds per hour.

xi. Hg emissions must not exceed 3.3 E-04 pounds per ton of fired product; or

xii. Hg emissions must not exceed 91 micrograms per dry standard cubic meter at 17% O_2; or

xiii. Hg emissions must not exceed 0.0019 pounds per hour.

o. Plants 3 and 5 Operating Limits - The Permittee shall meet each operating limit that applies for the Plant 3 and Plant 5 tunnel kilns **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 5ES-LK5.1, and 5ES-LK5.2)** as follows:

i. Maintain no visible emissions from the stack.

ii. Maintain the kiln process rate at or below the kiln process rate determined according to Sections 2.2 B.1.y and z.

iii. Plant 3 kilns shall operate at a maximum process rate of less than 10 tons per hour, each.

p. Plant 4 Operating Limits - The Permittee shall meet each operating limit that applies for the Plant 4 tunnel kilns **(ID Nos. 4ES-LK4.1 and 4ES-LK4.2)** as follows:

i. Maintain the average pressure drop across the Dry Limestone Adsorber (DLA) for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl_2 performance test; or

ii. If monitoring the bypass stack damper position, initiate corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust to bypass the DLA and complete corrective action in accordance with the OM&M plan.

iii. Maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA at all times, and maintain the limestone feeder setting (on a per ton of fired product basis) at or above the level established during the HF/HCl/Cl_2 performance test in which compliance was demonstrated.

iv. Use the same grade of limestone from the same source as was used during the HF/HCl/Cl_2 performance test in which compliance was demonstrated and maintain records of the source and grade of limestone.

v. Maintain no visible emissions from the DLA stack.

q. Work Practice Standards – The Permittee shall meet each work practice standard that applies for each tunnel kiln **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LK4.1, 4ES-LK4.2, 5ES-LK5.1, and 5ES-LK5.2)** as follows:

i. Minimize dioxin and furan emissions by:

(A) Maintaining and inspecting the burners and associated combustion controls (as applicable); and

(B) Tuning the specific burner type to optimize combustion.

ii. During periods of startup, minimize HAP emissions by:

(A) Establishing the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and temperature profile for each kiln without an APCD, and including them in the first compliance report as specified in Sections 2.2 B.1.uu through zz; and
(B) After initial charging of the kiln with loaded kiln cars, remain at or below the startup push rate for the kiln until the kiln exhaust reaches the minimum APCD inlet temperature for a kiln with an APCD or until the kiln temperature profile is attained for a kiln with no APC; and
(C) For kilns with an APCD, begin venting the exhaust from the kiln through the APCD by the time the kiln exhaust temperature reaches the minimum APCD inlet temperature.

iii. During periods of shutdown, minimize HAP emissions by:
(A) Not pushing loaded kiln cars into the kiln once the kiln exhaust temperature falls below the minimum APCD inlet temperature if the kiln is controlled by an APCD or when the kiln temperature profile is no longer maintained for an uncontrolled kiln; and
(B) For kilns with an APCD, continue venting the exhaust from the kiln through the APCD until the kiln exhaust temperature falls below the minimum inlet temperature for the APCD.

iv. During periods of control device maintenance, minimize HAP emissions by:
(A) Developing and using a temperature profile for each kiln; and
(B) Developing and following maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices and controls that regulate air-to-fuel ratios; and
(C) Developing and maintaining records for each applicable kiln relating to control device maintenance and documentation of any approved routine control device maintenance request if requested as specified in Section 2.2 B.1.m.

v. To meet the emission limitations and operating limits in Sections 2.2 B.1.n through p, the Permittee shall use one of the following options:
i. Emissions control system – Use an emissions capture and collection system and an APCD, and demonstrate that the resulting emissions meet the emission limits in Section 2.2 B.1.n, above, and that the capture and collection system and APCD meet the applicable operating limits in Sections 2.2 B.1.o and p; and/or
ii. Process changes - Use low-HAP raw materials or implement manufacturing process changes and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Section 2.2 B.1.n, above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the emission limitations, operating limitations, and work practice standards in Sections 2.2 B.1.n through q are not met.

Performance Testing and Operating Limit Establishment [40 CFR 63.8435 - 40 CFR 63.8445]

r. The Permittee shall conduct the initial performance test within 180 calendar days after the compliance date that is specified for the affected source in Section 2.2 B.1.b and according to the provisions in 40 CFR 63.7(a)(2).
s. For each affected kiln that is subject to the emission limits specified in Section 2.2 B.1.n, the Permittee shall conduct a performance test at least every 5 years following the initial performance test.
t. A new performance test must be conducted to change the parameter value for any operating limits specified in the OM&M plan.
u. The Permittee shall conduct each performance test that applies to the tunnel kilns **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LK4.1, 4ES-LK4.2, 5ES-LK5.1, and 5ES-LK5.2)** according to the requirements of Table 4 to 40 CFR 63 Subpart JJJJJ and 40 CFR 63.7.
v. Before conducting the performance test, the Permittee must install and calibrate all monitoring equipment.
w. Performance tests shall be conducted under such conditions as the Administrator specifies based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. Performance tests shall not be conducted during periods of malfunction. The Permittee shall record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the Permittee shall make available to the Administrator such records as may be necessary to determine the condition of performance tests.
x. At least three separate test runs for each performance test are required as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.
y. The Permittee shall use the data gathered during the performance test and the equations in Sections 2.2 B.1.y.i and ii to determine compliance with the emission limitations as follows:
i. To determine compliance with the production-based particulate matter (PM) and mercury (Hg) emission limits in Section 2.2 B.1.n.ii through vii above, the Permittee shall calculate the mass emissions per unit of production for each test run using Equation 1 below. This equation may also be used to determine the mass emissions per unit of production for acid gases hydrogen chloride (HCl), hydrogen fluoride (HF), and chlorine (Cl_2) for use in Equations 4 and 6, below.

$$MP = \frac{ER}{P} \qquad \text{(Equation 1)}$$

Where:
MP = mass per unit of production in pounds of pollutant per ton of fired product
ER = mass emission rate of pollutant (HF, HCl, PM, or Hg) during each test run in pounds per hour
P = production rate during each performance test run in tons of fired product per hour.

ii. To determine compliance with the health-based standard for acid gas HAP in Section 2.2 B.1.n.i, the Permittee shall:
(1) calculate the HCl-equivalent emissions for HF, HCl, and Cl2 for each tunnel kiln using Equation 2 below:

$$E_i = E_{HCl} + \left[E_{HF}\left(\frac{RfC_{HCl}}{RfC_{HF}}\right)\right] + \left[E_{Cl_2}\left(\frac{RfC_{HCl}}{RfC_{Cl_2}}\right)\right] \qquad \text{(Equation 2)}$$

Where:
E_i = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour
E_{HCl} = emissions of HCl, kilograms (pounds) per hour
E_{HF} = emissions of HF, kilograms (pounds) per hour
E_{Cl2} = emissions of Cl_2, kilograms (pounds) per hour
RfC_{HCl} = reference concentration for HCl, 20 micrograms per cubic meter
RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter
RfC_{Cl2} = reference concentration for Cl_2, 0.15 micrograms per cubic meter

(2) For multiple tunnel kilns, sum the HCl-equivalent values for all tunnel kilns at the facility using Equation 3:

$$E_{total} = \sum_{i=1}^{n} E_i \qquad \text{(Equation 3)}$$

(3) Compare this value to the health-based standard for acid gas HAP in Section 2.2 B.1.n.i.

z. The Permittee shall establish each site-specific operating limit in Section 2.2 B.1.o.ii according to the following specifications:
i. For the Plant 5 kilns, calculate the maximum potential HCl-equivalent emissions for HF, HCl, and Cl_2 for each tunnel kiln using Equation 4:

$$E_{\max i} = (Cap_i)\left[(MP_{iHCl}) + (MP_{iHF})\left(\frac{RfC_{HCl}}{RfC_{HF}}\right) + \left(MP_{iCl_2}\right)\left(\frac{RfC_{HCl}}{RfC_{Cl_2}}\right)\right] \qquad \text{(Equation 4)}$$

Where:
$E_{max\ i}$ = maximum potential HCl-equivalent emissions for kiln i in pounds per hour
Cap_i = design capacity for kiln i, in tons of fired product per hour
MP_{iHCl} = mass of HCl per unit of production for kiln i, in pounds of HCl per ton of fired product
MP_{iHF} = mass of HF per unit of production for kiln i, in pounds of HF per ton of fired product
MP_{iCl2} = mass of Cl_2 per unit of production for kiln i, in pounds of Cl_2 per ton of fired product
RfC_{HCl} = reference concentration for HCl, 20 micrograms per cubic meter
RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter
RfC_{Cl2} = reference concentration for Cl_2, 0.15 micrograms per cubic meter

ii. For multiple tunnel kilns, sum the maximum potential HCl-equivalent values for all tunnel kilns at the facility using Equation 5:

$$E_{\max total} = \sum_{i=1}^{n} E_{\max i} \qquad \text{(Equation 5)}$$

Where:
$E_{max\ total}$ = maximum potential HCl-equivalent emissions for total of all kilns at facility in pounds per hour

$E_{max\ i}$ = maximum potential HCl-equivalent emissions for kiln i in pounds per hour
n = number of tunnel kilns at facility

iii. For a single tunnel kiln, if the total facility maximum potential HCl-equivalent emissions ($E_{max\ total}$) are greater than the HCl-equivalent limit in Section 2.2 B.1.n.i, determine the maximum process rate for the tunnel kiln using Equation 6 that would ensure the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit.

$$P_{\max i} = \frac{HCl-eq}{\left[(MP_{iHCl})+(MP_{iHF})\left(\frac{RfC_{Hcl}}{RfC_{HF}}\right)+(MP_{iCl_2})\left(\frac{RfC_{HCl}}{RfC_{Cl_2}}\right)\right]} \quad \text{(Equation 6)}$$

Where:
$P_{max\ i}$ = maximum process rate for kiln i in tons per hour
HCl-eq = HCl-equivalent limit in Section 2.2 B.1.n (57 pounds per hour)
MP_{iHCl} = mass of HCl per unit of production for kiln i in pounds of HCl per ton of fired product
MP_{iHF} = mass of HF per unit of production for kiln i in pounds of HF per ton of fired product
MP_{iCl2} = mass of Cl2 per unit of production for kiln i in pounds of Cl2 per ton of fired product
RfC_{HCl} = reference concentration for HCl (20 micrograms per cubic meter)
RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter
RfC_{Cl2} = reference concentration for Cl_2, 0.15 micrograms per cubic meter

iv. If multiple tunnel kilns are at the facility and the total facility maximum potential HCl-equivalent emissions ($E_{max\ total}$) are greater than the HCl-equivalent limit in Section 2.2 B.1.n.i, determine the combination of maximum process rates that would ensure that total facility maximum potential HCl-equivalent remains at or below the HCl-equivalent limit. The maximum process rates would become the operating limits for process rate and must be included in the OM&M plan.

aa. For each affected kiln that is subject to the emissions limits in Section 2.2 B.1.n and is equipped with an APCD that is not addressed in Table 2 of 40 CFR 63 Subpart JJJJJ or that is using process changes as a means of meeting the emission limits in Section 2.2 B.1.n, the Permittee shall meet the requirements in 40 CFR 63.8(f) and the following requirements:
   i. Submit a request for approval of alternative monitoring procedures to the Administrator no later than the notification of intent to conduct a performance test. The request must contain the following information:
      (A) A description of the process changes.
      (B) The type of monitoring device or procedure that will be used.
      (C) The operating parameters that will be monitored.
      (D) The frequency that the operating parameter values will be determined and recorded to establish continuous compliance with the operating limits.
   ii. Establish site-specific operating limits during the performance test based on the information included in the approved alternative monitoring procedures request and, as applicable, as specified in Sections 2.2 B.1.y and z.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the performance tests are not conducted and the operating limits are not established as stated in Section 2.2 B.1.r through aa above.

Continuous Monitoring System: Installation, Operation, and Maintenance Requirements [40 CFR 63.8450]

bb. The Permittee shall install, operate and maintain each continuous monitoring system (CMS) according to the OM&M plan and the following requirements:
   i. Conduct a performance evaluation of each CMS according to the OM&M plan.
   ii. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, the Permittee shall have at least three of four equally spaced data values (or at least 75 percent if the Permittee collects more than four data values per hour) for that hour (not including startup, shutdown, or malfunction).
   iii. Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, the Permittee shall have at least 75 percent of the recorded readings for that period (not including startup, shutdown, or malfunction).
   iv. Record the results of each inspection, calibration, and validation check.

v. At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

cc. For each pressure measurement device, the Permittee shall meet the following requirements:
i. Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.
ii. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.
iii. Use a gauge with a minimum measurement sensitivity of 0.5 inches of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.
iv. Check the pressure tap daily to ensure that it is not plugged.
v. Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
vi. Any time the sensor exceeds the manufacturer's specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.
vii. At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

dd. For each temperature measurement device, the Permittee shall meet the following requirements:
i. Locate the measurement device in a position that provides a representative temperature.
ii. Use a measurement device with a minimum sensitivity of 1 percent of the temperature being measured.
iii. At least semiannually, conduct a calibration check.

ee. For each limestone feed system on a DLA, the Permittee shall ensure on a monthly basis that the feed system replaces limestone at least as frequently as the schedule set during the performance test, and the Permittee shall meet the requirements in Sections 2.2 B.1.bb.i, iv, and v.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the continuous monitoring systems are not installed, operated, and maintained as stated in Sections 2.2 B.1.bb. through ee. above.

Initial Compliance Requirements [40 CFR 63.8455]

ff. The Permittee shall demonstrate initial compliance with each emission limitation, work practice standard, and operating limit in Sections 2.2 B.1.n through p according to the requirements in Sections 2.2 B.1.r through aa and Tables 4 and 5 of 40 CFR 63 Subpart JJJJJ.

gg. The Permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Section 2.2 B.1.f and Table 8 of 40 CFR 63 Subpart JJJJJ.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the initial compliance requirements are not met as stated in Sections 2.2 B.1.ff and gg above.

Continuous Compliance Requirements [40 CFR 63.8465 and 40 CFR 63.8470]

hh. The Permittee shall monitor and collect data according to Sections 2.2 B.1.hh through nn.

ii. Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities, the Permittee shall monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, or malfunction when the affected source is operating.

jj. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. The Permittee shall use all the valid data collected during all other periods in assessing compliance. Any averaging period for which there is no valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

kk. The Permittee shall demonstrate continuous compliance with each emission limit, operating limit, and work practice standard listed in Sections 2.2 B.1.n through p according to the following requirements.
i. The Permittee shall perform visible emissions observations of the stack at the frequency specified in Section 2.2 B.1.mm using Method 22 of 40 CFR Part 60 Appendix and maintaining no visible emissions from the stack.
ii. If the last calculated total facility maximum potential HCl-equivalent was not at or below the health-based standard in Section 2.2 B.1.n.i, the Permittee shall collect the kiln process rate data and reduce the kiln process rate data to a 3-hour block average according to Section 2.2 B.1.bb; and maintain the average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to Section 2.2 B.1.z.
iii. The Permittee shall maintain and inspect the burners and associated combustion controls and tune the specific burner type to optimize combustion no later than 36 calendar months after the previous tune up.
iv. The Permittee shall maintain records of burner tune ups used to demonstrate compliance with the dioxin/furan work practice standard.
v. The Permittee shall submit a report of the most recent tune up for each tunnel kiln conducted with the compliance report.
vi. Plant 4 only – The Permittee shall demonstrate continuous compliance according to the following requirements:

(A) Collect the DLA pressure drop data and reduce the DLA pressure drop data to 3-hour block averages according to Section 2.2 B.1.bb. The average pressure drop across the DLA shall be maintained for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl_2 performance test in which compliance was demonstrated; or

(B) Continuously monitor the bypass stack damper position at least once every 15 minutes during normal kiln operation, and initiate corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust gas to bypass the DLA, and complete corrective action in accordance with the OM&M plan.

(C) Verify that the limestone hopper and storage bin (located at the top of the DLA) contain adequate limestone by performing a daily visual check, which could include one of the following: (1) conducting a physical check of the hopper; (2) creating a visual access point on the side of the hopper; (3) installing a camera in the hopper that provides continuous feed to a video monitor in the control room; or (4) confirming that load level indicators in the hopper are not indicating the need for additional limestone.

(D) Record the limestone feeder setting daily (on a per ton of fired product basis) to verify that the feeder setting is being maintained at or above the level established during the HF/HCl/Cl_2 performance test in which compliance was demonstrated.

(E) Use the same grade of limestone from the same source as was used during the HF/HCl/Cl_2 performance test and maintain records of the source and type of limestone.

(F) Perform visible emissions observations of the DLA stack at the frequency specified in Section 2.2 B.1.mm and maintain no visible emissions from the stack.

ll. Each instance in which the Permittee did not meet each emission limit and each operating limit that applies shall be reported. These instances are deviations from the emission limitations in Section 2.2 B.1.n. These deviations must be reported according to the requirements in Section 2.2 B.1.uu.ii.

mm. **VE testing.** The Permittee shall demonstrate continuous compliance with the operating limits in Section 2.2 B.1.o.i for visible emissions (VE) from all tunnel kilns by monitoring VE at each kiln stack according to the following:

i. Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A. The Permittee shall conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

ii. If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A, the Permittee shall promptly conduct an opacity test, according to the procedures of Method 9 of 40 CFR part 60, appendix A. If opacity greater than 10 percent is observed the Permittee shall initiate and complete corrective actions according to the OM&M plan.

iii. The Permittee may decrease the frequency of Method 22 testing from daily to weekly for a kiln stack if one of the following conditions are met:

(A) No VE are observed in 30 consecutive daily Method 22 tests for any kiln; or

(B) No opacity greater than 10 percent is observed during any Method 9 tests for any kiln stack.

iv. If VE are observed during any weekly test and opacity greater than 10 percent is observed in the subsequent Method 9 test, the Permittee shall promptly initiate and complete corrective actions according to the OM&M plan, resume testing of that kiln stack following Method 22 of 40 CFR part 60, appendix A, on a daily basis and maintain that schedule until one of the conditions in Section 2.2 B.1.mm.iii is met, at which time the Permittee may again decrease the frequency of Method 22 testing to a weekly basis.

v. If greater than 10 percent opacity is observed during any test conducted using Method 9 of 40 CFR part 60, appendix A-4, you must report these deviations by following the requirements in Section 2.2 B.1.uu.ii.

nn. **Alternative to VE testing.** In lieu of meeting the requirements of Section 2.2 B.1.mm, you may conduct a PM test at least once every year following the initial performance test, according to the procedures of Method 5 of 40 CFR part 60, appendix A-3, and the provisions of Sections 2.2 B.1.x and y.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the continuous compliance requirements are not met as stated in Section 2.2 B.1.hh through nn above.

Recordkeeping Requirements [40 CFR 63.8490 and 40 CFR 63.8495]

oo. The Permittee shall keep the following records:

i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements of 40 CFR 63.10(b)(2).

ii. Records of performance tests according to the requirements of 40 CFR 63.10(b)(2)(viii).

pp. The Permittee shall keep records of the activities required in Sections 2.2 B.1.hh through nn to show continuous compliance with each emission limitation and work practice standard.

qq. The following records must also be maintained:

i. For each deviation from the requirements of this subpart, record the following information:
   (A) The date, time, and duration of the deviation.
   (B) A list of the affected sources or equipment.
   (C) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
   (D) Actions taken to minimize emissions in accordance with Section 2.2 B.1.h and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
ii. For each affected source, records of production rates on a fired-product basis.
iii. Records for any approved alternative monitoring or test procedures.
iv. Current copies of the OM&M plan, including any revisions, with records documenting conformance.
v. Records of maintenance and inspections performed on the APCD.
vi. Records of burner tune-ups used to comply with the dioxin/furan work practice standards for tunnel kilns in Section 2.2 B.1.p.i.
vii. For periods of startup and shutdown, records shall be kept of the following information:
   (A) The date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.
   (B) For periods of startup, the kiln push rate and kiln exhaust temperature prior to the time the kiln exhaust reaches the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is attained (for a kiln with no APCD).
   (C) For periods of shutdown, the kiln push rate and kiln exhaust temperature after the time the kiln exhaust falls below the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is no longer maintained (for a kiln with no APCD).
viii. All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Section 2.2 B.1.p.

rr. The records must be in a form suitable and readily available for expeditious review, according to the requirements of 40 CFR 63.10(b)(1).

ss. Each record must be kept for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in 40 CFR 63.10(b)(1).

tt. Each record shall be kept onsite for a period of at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The records may be kept offsite for the remaining 3 years.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Permittee does not keep each record that applies according to the requirements in Sections 2.2 B.1.oo. through tt.

Reporting Requirements [40 CFR 63.8485]

uu. The Permittee must submit a compliance report semiannually according to the requirements in Section 2.2 B.1.vv, below. The report must contain the following information:
   i. If there are no deviations from any emission limitations that apply, a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CMS was out-of-control as specified in the facility's OM&M plan, a statement must be included that there were no periods during which the CMS was out-of-control during the reporting period.
   ii. If there was a deviation from any emission limitation during the reporting period, the report must contain the information in Section 2.2 B.1.ww. If there were periods during which the CMS was out-of-control, as specified in the facility's OM&M plan, the report must contain the information in Section 2.2 B.1.ww.

vv. Unless the Director has approved a different schedule for submission of reports under 40 CFR 63.10(a), the Permittee shall submit each compliance report according to the following requirements:
   i. The first compliance report shall cover the period beginning on the compliance date that is specified for the affected sources in Section 2.2 B.1.b and ending on June 30 or December 31. The first reporting period must be at least 6 months, but less than 12 months. For example, if the compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.
   ii. The first compliance report shall be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.
   iii. Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
   iv. Each subsequent compliance report shall be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

ww. The compliance report shall contain the following information:
  i. Company name and address.
  ii. Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
  iii. Date of report and beginning and ending dates of the reporting period.
  iv. A description of control device maintenance performed while the control device was offline, and the kiln controlled by the control device was operating, including the information specified as follows:
    (A) The date and time when the control device was shut down and restarted;
    (B) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline;
    (C) A statement of whether or not the control device maintenance was included in an approved routine control device maintenance request as specified in 40 CFR 63.8420(d). If the control device maintenance was included in an approved routine control device request, the following information must be reported:
      (1) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.
      (2) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance alternative standard during the current semiannual compliance period and during the previous semiannual compliance period.
      (3) Based on the information recorded in Sections 2.2 B.1.ww.iv.(C).(1) and (2), compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Equation 7:

$$RM = \frac{DT_p + DT_c}{KU_p + KU_c}(100) \qquad \text{(Equation 7)}$$

Where:
RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance;
DT_P = Control device downtime claimed under the routine control device maintenance alternative standard for the previous semiannual compliance period;
DT_C = Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period;
KU_P = Kiln uptime for the previous semiannual compliance period;
KU_C = Kiln uptime for the current semiannual compliance period.

  v. A report of the most recent burner tune-up conducted to comply with the dioxin/furan work practice standard in Section 2.2 B.1.p.i.
  vi. If there are no deviations from any emission limitations (emission limits or operating limits) that apply to the Permittee, the compliance report shall contain a statement that there were no deviations from the emission limitations during the reporting period.
  vii. If there were no periods during which the CMS was out-of-control as specified in the OM&M plan, the compliance report shall contain a statement that there were no periods during which the CMS was out of control during the reporting period.
  viii. The first compliance report must contain the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and the temperature profile for each kiln without an APCD.
  ix. For each deviation that occurs at an affected source, report such events in the compliance report by including the following information:
    (A) The date, time, and duration of the deviation.
    (B) A list of the affected sources or equipment for which the deviation occurred.
    (C) An estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

xx. For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where the Permittee is using a CMS to comply with the emission limitations in this subpart, the Permittee shall include the information in paragraphs (i) through (xi) of this section as follows. This includes periods of startup, shutdown, malfunction, and routine control device maintenance.
  i. The total operating time of each affected source during the reporting period.
  ii. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

iii. The date, time, and duration that each CMS was out-of-control, including the pertinent information in the OM&M plan.
iv. Whether each deviation occurred during routine control device maintenance covered in the approved routine control device maintenance alternative standard or during another period, and the cause of each deviation (including unknown cause, if applicable).
v. A description of any corrective action taken to return the affected unit to its normal or usual manner of operation.
vi. A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
vii. A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
viii. A brief description of the process units.
ix. A brief description of the CMS.
x. The date of the latest CMS certification or audit.
xi. A description of any changes in CMS, processes, or control equipment since the last reporting period.

yy. If the Permittee has obtained a Title V operating permit according to 40 CFR part 70 or 40 CFR part 71, the Permittee shall report all deviations in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the Permittee submits a compliance report required by Section 2.2 B.1.uu along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation the Permittee may have to report deviations from permit requirements to the permitting authority.

zz. Within 60 calendar days after the date of completing each performance test (as defined in 40 CFR 63.2) required by this subpart, the Permittee shall submit the results of the performance test following the procedure specified in either paragraph (i) or (ii) of this section.
i. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*) at the time of the test, the results of the performance test shall be submitted to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/*).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If some of the performance test information being submitted is claimed as confidential business information (CBI), the Permittee shall submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
ii. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Permittee does not submit each report that applies according to the requirements in Sections 2.2 B.1.uu. through zz.

State-enforceable only

2. 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.

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

Emission Source ID No.		Emission Source Description[1,2]
33 Making Line	I-CV-032	Conveyor to Plant 3 (150 tph)
	I-33 Dirt Bin	Dirt bin (60 tph)
	I-CV-056	33 dirt belt (60 tph)
	I-PG-001	Pug mill (60 tph)
	I-FD-012	33 88-C feeder (15 tph)
	I-CH-001	33 waste brick chipper (8 tph)
	I-3ES-BRICKROOM	Plant 3 brick making room air exhaust sent to cyclones (3CY-T1 and 3CY-T2, two simple cyclones, 59 inches in diameter, each) followed by bagfilter venting indoors
731-125-33 Extruder	I-EX-001	33 extruder (60 tph)
731-165 33 Delivery Conveyors	I-CV-050	33 tumble ramp belt (60 tph)
	I-CV-051	33 delivery belt (60 tph)
	I-CV-052	33 short scrap belt from chopper (10 tph)
	I-CV-053	Scrap belt over tracks (10 tph)
	I-CV-054	33 scrap belt to 88C feeder (10 tph)
	I-CV-055	33 short belt from 88C feeder (13 tph)
	I-CV-057	33 dirt belt (60 tph)
	I-CV-058	33 die scrap belt (3 tph)
	I-CV-068	33 & 34 cutter scrap belt (3 tph)
	I-CV-122	Waste conveyor (3 tph)
34 Making Line	I-CV-161	34 dirt belt on top of building (150 tph)
	I-BN-002	34 dirt bin (60 tph)
	I-PG-002	34 pug mill (60 tph)
	I-FD-013	34 88-C feeder (18 tph)
	I-CH-002	34 waste brick chopper (8 tph)
732-125 34 Extruder	I-EX-002	34 extruder (60 tph)
732-165 34 Delivery Conveyors	I-CV-061	34 delivery belt
	I-CV-062	34 scrap belt from chopper

	I-CV-063	34 scrap belt from 88C feeder
	I-CV-064	34 dirt belt to pug mill
	I-CV-066	34 dirt belt
	I-CV-066A	34 die scrap belt
732-150 34 Coating/Texturing	I-FL-002	34 flapper
	I-CV-067	34 sand mixer belt
732-199 34 Line Misc.	I-PP-015	34 vacuum pump
DC-001 Dust Collection System Making 3	I-BF3	Bagfilter vents inside
	I-TK-004	Coray 22 brick oil tank
	I-TK-005	P#-Additive -A tank (calcium Lignofulfate 20,000 gallons)
Material Storage in Plant 3 Making	I-AU-031	Sand bin auger bin #1
	I-AU-032	Pine Hall sand bin auger
	I-AU-033	Sawdust bin auger
	I-AU-034	Fire Clay bulk bin auger
	I-BN-033	Misc. sand bin #1
	I-BN-034	Pine Hall sand bin #2
	I-BN-035	Sawdust bin- feeds plant 4 mixer
	I-BN-036	Fire Clay bulk bin
	I-BN-037	Plant 3 Pine Hall sand bin
	I-BN-038	Waste bin - middle
	I-BN-039	Aberdeen Sand holding bin
	I-BN-040	Old Dutch Sand bin
	I-BN-041	Sawdust holding bin
	I-BN-042	Pine Hall sand holding bin
	I-BN-043	Aberdeen sand holding bin
	I-BN-044	Old Dutch Sand holding bin
	I-BN-045	Aplite holding bin
	I-CV-124	Conveyor 3#-auger
	I-MX-005	Plant 4 mixer

	I-MX-006	Old Muller mixer
Grinding Facilities	I-3ES-CRUSH	One raw material crushing and handling operation including:
	I-BFG	Bagfilter vents inside
	I-3CR972-5	One twenty four inches by forty eight inches standby crusher (250 tons per hour capacity)
	I-3HM972-6	One double roll hammermill
	I-3GR972-7	One Steele Incla grinders and two Stedman grinders
	I-3SS972-8	Two Simplicity scalping screens
	I-3SS972-9	Ten Simplicity screens (4 feet by 10 feet each)
	I-3DS972-10	Eight Deister screens (4 feet by 8 feet each)
	I-3C-33	One conveyor belt from the standby crusher into the grinding building (30 inches in width)
78-120 Sand Drying	I-AU-029	Auger #1 Top of Conveyor #1
	I-BN-032	Big bin
	I-BU-007	Gas burner on tub (250,000 Btu/hr)
	I-CV-120	Big bin conveyor-under bin
	I-CV-121	Conveyor #1 -leaving bin
	I-CV-122A	Waste conveyor
	I-CV-123	Conveyor #2 under tub
	I-DR-005	Dryer tub
	I-SC-034	Screen #1
Plant 4 Making	I-FD-007	Plant 4 feeders (two at 150 tph, each)
	I-CV-033	Short belt to Plant 4
	I-CV-034	Long belt to Plant 4
831-110 41 Bins	I-BN-005	Bin #1
	I-BN-006	Bin #2
	I-CV-074	Bin #1 conveyor
	I-CV-075	Bin #2 conveyor
	I-CV-076	Conveyor #1
	I-CV-077	Conveyor #2
831-120	I-CV-078	Conveyor #3

41 Pugs	I-CV-079	Conveyor #4
	I-PB-003	Pug mill #1
	I-PUG-004	Pug mill #2
	I-FD-041	41-88 even feeder
831-140 41 Extruder	I-EX-009	41 extruder
	I-PP-021	Vacuum pump
831-140 41 Making Line Misc.	I-AU-011	Waste auger under 41 line
	I-CH-003	41 waste brick chopper
	I-CT-007	41 slug cutter
	I-CV-080	Conveyor #5
	I-CV-081	Conveyor #6
	I-CV-082	Conveyor #7
	I-CV-083	Conveyor #8
831-150 41 Setter	I-AU-012	Slug ejector auger 41 setter
	I-CT-008	Wire bank 41 setter
	I-CV-084	41-23 waste conveyor
	I-CV-085	41-25 conveyor
	I-CV-086	41-26 conveyor
	I-CV-087	41-27 conveyor
Sand Coatings SB-003-CY003	I-SB-003	41 sandbox
	I-MX-002	41 slurry barrel mixer
	I-AU-013	41-18 big hopper auger #1
	I-AU-014	41-19 big hopper auger #2
	I-AU-015	41-20 big hopper auger #3
	I-BN-007	big hopper bin#1
	I-BN-008	big hopper bin#2
	I-BN-009	big hopper bin#3
	I-CV-088	41-14 small hopper conveyor #1
	I-CV-089	41-15 small hopper conveyor #2

	I-CV-090	41-16 small hopper conveyor #3
	I-CV-091	41-17 small hopper conveyor #4
	I-CV-092	41-104 bin out conveyor
	I-CV-093	41-11 conveyor to sandbox
	I-CV-094	Return waste conveyor to sandbox
	I-CV-095	41-13 waste cleanout conveyor
	I-SC-032	vibrator screen
831-180 41 4-Hopper Rig	I-AU-016	4- hopper auger #1
	I-AU-017	4- hopper auger #2
	I-AU-018	4- hopper auger #3
	I-AU-019	4- hopper auger #4
	I-BN-014	4- hopper big bin#1
	I-BN-015	4- hopper big bin#2
	I-BN-016	4- hopper big bin#3
	I-BN-017	4- hopper big bin#4
	I-BN-018	4- hopper small bin
	I-CV-096	41-4 hopper clean out conveyor
	I-VB-010	41-4 hopper small bin vibrators
	I-TK-006	Brick machine oil tank
832-110 42 Making Line	I-BN-019	Bin#1
	I-CV-097	Bin #1 conveyor
	I-FD-040	Special colorant feeder FD-040
	I-CV-099	Conveyor #3
832-120 42 Pugs	I-CV-100	Conveyor#4
	I-FD-043	42-88 Even Feeder
	I-PG-005	Pug #3
	I-PG-006	Pug #4
832-130 42 Extruder	I-EX-013	42 extruder
	I-PP-029	Vacuum pump

832-140 42 Line	I-AU-020	Waste augers under 42 line
	I-CH-004	42 waste brick chopper
	I-CT-009	42 slug cutter
	I-SE-001	42 slug ejector
	I-CV-101A	Doubler belt
	I-CV-101	Conveyor #5
	I-CV-102	Conveyor #6
	I-CV-103	Conveyor #7
	I-CV-104	Conveyor #8
832-150 42 Setter	I-CV-105	Double conveyor
	I-CV-106	42-14 waste conveyor
	I-CV-107	42-13 waste conveyor
	I-CV-107A	42-15 waste conveyor under setter
Sand Coatings 832-160	I-BN-020	Big hopper bin#1
	I-BN-021	Big hopper bin#2
	I-BN-022	Big hopper bin#3
	I-BN-023	Small hopper bin #1
	I-BN-024	Small hopper bin #2
	I-BN-025	Small hopper bin #3
	I-BN-026	Small hopper bin #4
	I-CV-108	42-21 small hopper conveyor #1
	I-CV-109	42-20 small hopper conveyor #2
	I-CV-110	42-19 small hopper conveyor #3
	I-CV-111	42-22 small hopper conveyor #4
	I-CV-112	42-23bin out conveyor to sandbox
	I-CV-113	42-24bin out conveyor to sandbox
	I-CV-114	42-25 bin out conveyor to sandbox
	I-CV-115	42-26 bin out conveyor to sandbox
	I-CV-116	42-17 return waste conveyor

	I-CV-117	42-22 waste cleanout conveyor
	I-SC-033	Vibrator screen
832-180 42 4 Hopper Rig	I-AU-024	4-hopper auger#1
	I-AU-025	4-hopper auger#2
	I-AU-026	4-hopper auger#3
	I-AU-027	4-hopper auger#4
	I-AU-028	Portable waste auger
	I-BN-027	4 hopper big bin#1
	I-BN-028	4 hopper big bin#2
	I-BN-029	4 hopper big bin#3
	I-BN-030	4 hopper big bin#4
	I-BN-031	4 hopper small bins
	I-CV-119	42-41 hopper clean out conveyor
	I-VB-008	Single hopper vibrator#1
	I-VB-009	Single hopper vibrator#2
871-110 P4 Rumbler/Monorail	I-CV-125	Waste conveyor monorail 1
	I-CV-131	Belt conveyor # 1 monorail 1
	I-CV-132	Belt conveyor # 2 monorail 1
	I-CV-133	Belt conveyor # 3 monorail 1
	I-CV-134	Belt conveyor # 4 monorail 1
	I-CV-135	Belt conveyor # 5 monorail 1
	I-CV-136	Belt conveyor # 6 monorail 1
	I-CV-137	Belt conveyor # 7 monorail 1
	I-CV-138	Belt conveyor # 8 monorail 1
872-110 P4 Dehacker	I-CV-126	Waste conveyor dehacker
	I-CV-139	Belt conveyor # 1 dehacker
	I-CV-140	Belt conveyor # 2 dehacker
	I-CV-141	Belt conveyor # 3 dehacker
	I-CV-142	Belt conveyor # 4 dehacker

	I-CV-143	Belt conveyor # 5 dehacker
	I-CV-144	Belt conveyor # 6 dehacker
	I-CV-145	Belt conveyor # 7 dehacker
	I-DC-003	Dust collection system
	I-TK-00	P4-additive tank [calcium Lignosulfate] - 30,000 gallons
896-110 Pugs and Feeders Shapes	I-BN-046	Dirt bin auger#1
	I-CV-148	Belt under bin (15 tph)
	I-CV-149	Belt feeding 25A pug (15 tph)
	I-PG-007	25A pug mill
	I-CV-150	Belt from 88 feeder (2 tph)
	I-FD-045	Even feeder
896-120 Shapes Extruder	I-EX-018	25A extruder (15 tph)
	I-PP-042	Vacuum pump
	I-PP-043	Oil pump
	I-CV-151	Short scrap belt (2tph)
	I-CV-152	Scrap belt under pt cutter
	I-CV-153	Scrap belt behind hacking line (2tph)
	I-CV-154	Scrap belt to 88 feeder (2tph)
	I-CV-155	#1-off bearing belt (15 tph)
	I-CV-156	#2-off bearing belt (15 tph)
	I-CV-157	Tumble belt (15 tph)
	I-CV-158	Delivery belt (15 tph)
	I-PU-042	Push-thru pusher (cutter) (15 tph)
	I-SB-006	Shapes sandbox (0.25tph)
962-120 Sawdust Scales/Dump/Screens	I-DP-001	Sawdust dump
	I-SC-023	Link-belt screen #1
	I-SC-024	Link-belt screen #2
	I-SC-025	Link-belt screen #3
	I-SC-026	Link-belt screen #4 (back-up)

	I-SC-027	Link-belt screen #5 (back-up)
	I-SC-028	Link-belt screen #6 (back-up)
	I-SC-029	Link-belt screen #7 (back-up)
	I-SC-030	Scalping screen
962-130 Sawdust Conveyors	I-CV-035	#3 belt (sawdust)
	I-CV-036	#5 stacker belt
	I-CV-037	#6 waste belt
	I-CV-038	#10 belt
	I-CV-039	#11 belt
	I-CV-040	#12 belt
	I-CV-041	#13 belt
	I-CV-042	#14 belt
	I-CV-043	#15 belt
	I-CV-044	#16 screw conveyor- top of silo
962-15 Sawdust Feeders	I-FD-009	#1 feeder -on road
	I-FD-010	#2 feeder -on dump
	I-FD-011	#9 feeder -new hopper
972-165 Conveyors	I-CV-002	1C-4(125 tph)
	I-CV-003	1C-2(125 tph)
	I-CV-004	1C-3(125 tph)
	I-CV-005	2C-4(125 tph)
	I-CV-006	2C-2(125 tph)
	I-CV-007	2C-3 (125 tph)
	I-CV-009	2C-1(84 tph)
	I-CV-010	#11 belt (25 tph)
	I-CV-011	#12 belt (81 tph)
	I-CV-012	#13 belt (25 tph)
	I-CV-013	CC-1(250 tph)
	I-CV-014	Plant 5 truck belt (200 tph)

	I-CV-015	CC-1-B (250 tph)
	I-CV-017	CC-3 (100 tph)
	I-CV-018	#6 belt and hopper (50 tph)
	I-CV-019	#7 belt (25 tph)
	I-CV-159	#9 belt (75 tph)
	I-CV-020	#10 belt (100 tph)
	I-CV-022	#1 waste belt (3 tph)
	I-Ptank 1 & 2	Two 30,000 gallon propane tanks
	I-HI-VAC4	Hi-Vac housekeeping at plant 4 kilns
	I-ES-1.1	Raw material storage
	I-ES-1.4	Ground storage
Miscellaneous	I-3-WHS	Plant 3 wood dust bin, screener, and two conveyors
	I-4WHS-SILO1	Plant 4 wood dust storage silo (7,915 cubic feet)
	I-4WHS-SILO2	Plant 4 wood dust storage silo (7,915 cubic feet)
	I-GEN **MACT ZZZZ** **NSPS JJJJ**	Natural gas-fired emergency generator (11 kilowatts maximum capacity)
	I-GEN1 and I-GEN2 **MACT ZZZZ**	Two natural gas-fired emergency generators (157 horsepower maximum capacity, each)
	I-GEN3 **MACT ZZZZ** **NSPS JJJJ**	Natural gas-fired emergency generator (22 kilowatts maximum capacity)
Water-controlled sources and clay extrusion under vacuum	I-MX-501	Double shaft mixer (55 tph)
	I-CV-509	Conveyor C-7 (55 tph)
	I-CV-510	Conveyor C-8 (55 tph)
	I-CV-511	Conveyor C-9 (55 tph)
	I-CV-512	Conveyor C-17 (5 tph)
	I-CV-512A	Conveyor C-17a
	I-CV-513	Conveyor C-19 (5 tph)
	I-CV-514	Conveyor C-20 (5 tph)
	I-FD-511	Even feeder (55 tph)
	I-PG-501	Pug mill (55 tph)
	I-EX-501	Extruder (55 tph)

	I-MX-502	Slinger #1 (0.075 tph)
	I-SL-501	Slurry system (0.075 tph)
	I-VB-501	Vibrating feeder-mangro (0.025 tph)
	I-CV-515	Conveyor C-10 (55 tph)
	I-CV-516	Conveyor C-11A (55 tph)
	I-CV-517	Conveyor C-11B (55 tph)
	I-CV-518	Conveyor C-11C (5 tph)
	I-CV-519	Conveyor C-12 (5 tph)
	I-CV-520	Conveyor C-13 (5 tph)
	I-CV-521	Conveyor C-14 (55 tph)
	I-CV-522	Conveyor C-15(3 tph)
	I-CV-523	Conveyor C-16(3 tph)
	I-CV-524	Marshalling conveyor (55 tph)
	I-CV-525	Separation conveyor (55 tph)
	I-CV-526	2 ¼ English edge press (55tph)
	I-CV-527	3inch English edge press (55 tph)
	I-MI-503	Setting machine (55 tph)
	I-CV-535	Setter robot scrap conveyor (3 tph)
	I-RB-501	Setter robot #1 (27.5 tph)
	I-RB-502	Setter robot #2 (27.5 tph)
	I-MI-508	Packaging machine (55 tph)
	I-CH-501	Waste chopper (8 tph)
	I-PP-503	Vacuum pump
	I-PTANK	Propane tank 30,000 gallon
	I-HI-VAC5	HI-Vac (housekeeping at kiln cars
	I-ES5.5	Raw material storage
	I-Dirt Storage	Ground dirt storage - Plant 5
	I-Ground Store	Ground material storage (Plant 3 and 4)
	I-Stockpile	Raw materials stockpiles (four acres)

	I5-C-1	Covered conveyor (24 inches wide)
Misc. Tanks	I-D-TANK1	Diesel fuel storage tank (10,000 gallons maximum capacity) Plant 4 upper yard
	I-D-TANK2	Diesel fuel storage tank (10,000 gallons maximum capacity) Customer service
	I-D-TANK3	Diesel fuel storage tank (500 gallons maximum capacity) Plant 5
	I-G-TANK1	Gasoline fuel storage tank (3,000 gallons maximum capacity) Plant 4 upper yard

[1] 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.

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

SECTION 4 - GENERAL CONDITIONS (version 8.0, 07/10/2024)

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 the 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, one copy 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.

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

G. **Title V Permit Modifications**
1. 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.
2. 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.
4. 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.
5. 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**
1. 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 **Reporting Requirements for Excess Emissions** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 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 **Reporting Requirements for Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

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

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 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. **Retention of Records** [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. **Compliance Certification** [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)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 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.

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 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]

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 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.