ROY COOPER Governor ELIZABETH S. BISER Secretary MICHAEL ABRACZINSKAS Director



#### XXXXX XX, 2023

Eric Potts Production Manager Statesville Brick Company P.O. Box 471 Statesville, NC 28687

SUBJECT: Air Quality Permit No. 02493T12

Facility ID: 4900070 Statesville Brick Company

Statesville, NC

Iredell

Fee Class: Title V PSD Class: Minor

Dear Mr. Potts:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 02493T12 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



Mr. Eric Potts
XXXXX XX, 2023
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143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Iredell County has triggered increment tracking under PSD for PM-10, NOx, and SO2. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from (*Enter Permit Issuance Date*) until (*Enter Permit Expiration Date*), is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Emily Supple at 919-707-8481 or emily.supple@ncdenr.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 (4900070)
 Connie Horne (cover letter only)

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

**Right of the Permit Applicant or Permittee to File a Contested Case:** Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee 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 <a href="https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case">https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case</a>. 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. 02493T11:\*

Page No.	Section	Description of Changes
Cover and	Throughout	Updated all tables, dates, and permit revision numbers
throughout		
5-6	2.1 A.1	Updated condition to be consistent with shell language
6	2.1 A.2	Updated condition to be consistent with shell language
6-7	2.1 A.3	Updated condition to be consistent with shell language
8-17	2.1 A.5	Added MACT Subpart JJJJJ for Brick Manufacturing
18-19	2.1 B.1	Updated condition to be consistent with shell language
19	2.1 B.2	Updated condition to be consistent with shell language
20	2.1 B.3	Removed the kilns (ID Nos. ES-K1 and ES-K2) from Condition
		02D .1100 and added condition to Section 2.1 B
20-21	2.1 B.4	• Removed the kilns (ID Nos. ES-K1 and ES-K2) from Condition
		02Q .0711 and added condition to Section 2.1 B
22	2.1 C.1	Updated condition to be consistent with shell language
N/A	N/A	Condition 02D .0515 removed for shale/clay grinding and
		screening operation (ID No. F-GR)
N/A	N/A	• Condition 02D .1100 removed from Section 2.2 A.
N/A	N/A	Condition 02Q .0711 removed from Section 2.2 A
25-33	General	Updated to the latest version of DAQ shell version 6.0
	Conditions	01/17/2022.

<sup>\*</sup> 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
02493T12	02493T11	XXXX	XXXX

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

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

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Statesville Brick Company

Facility ID: 4900070
Primary SIC Code: 3251
NAICS Code: 327121

Facility Site Location: 391 Brickyard Road

City, County, State, Zip: Statesville, Iredell County, North Carolina 28687

Mailing Address: P.O. Box 471

City, State, Zip: Statesville, North Carolina 28687

Application Number(s): 4900070.20A Complete Application Date(s): November 3, 2020

Division of Air Quality, Mooresville Regional Office Regional Office Address: 610 East Center Avenue

**Suite 301** 

Mooresville, NC, 28115

Permit issued this the XX day of XXXXX, XXXX. (Engineer Note: enter in date; do not leave blanks here!)

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

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- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

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SECTION 4: GENERAL PERMIT CONDITIONS

#### List of Acronyms

AOS Alternative Operating Scenario
BACT Best Available Control Technology

**BAE** Baseline Actual Emissions

Btu British thermal unit CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

**CEDRI** Compliance and Emissions Data Reporting Interface

**CFR** Code of Federal Regulations

CO Carbon Monoxide

**COMS** Continuous Opacity Monitoring System

CSAPR Cross-State Air Pollution Rule DAO 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<sub>x</sub> 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<sub>2.5</sub> Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less PM<sub>10</sub> 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<sub>2</sub> 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
ES-KS1 2D .1109 Case By Case MACT MACT JJJJJ	one sawdust/natural gas-fired brick tunnel kiln (30 million Btu per hour heat input rate and 9.95 tons per hour fired brick maximum process rate)	NA	NA
ES-SD1	one sawdust fuel rotary dryer, heated by waste heat from the brick tunnel kiln (3.75 tons per hour maximum drying capacity)	CD-SD-1	one simple cyclone (96 inches in diameter)
ES-KS2 2D .1109 Case By Case MACT MACT JJJJJ	one sawdust/natural gas-fired brick tunnel kiln (30 million Btu per hour heat input rate and 9.35 tons per hour fired brick maximum process rate)	NA	NA
ES-SD2	one sawdust fuel rotary dryer, heated by waste heat from the brick tunnel kiln (3.75 tons per hour maximum drying capacity)	CD-SD2	one simple cyclone (96 inches in diameter)
F-GR	one shale/clay grinding and screening operation (110 tons per hour maximum process rate) consisting of:  one single roll crusher (ID No. F-CR1), one dry pan ID No. F-DP), one single screen (ID No. F-S1), two double deck screens (ID Nos. F-DDS1 and F-DDS2), and one hammermill (ID No. F-HM1)	NA	NA

# **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. One sawdust/natural gas-fired brick tunnel kiln (ID No. ES-KS1) One sawdust/natural gas-fired brick tunnel kiln (ID No. ES-KS2)

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 $\leq 30$ 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
Odors	State-enforceable only Control of odorous emissions See Section 2.2 A.1	15A NCAC 02D .1806
Filterable PM	Implement best work practices	15A NCAC 02D .1109
Hydrogen Fluoride	Implement best work practices	15A NCAC 02D .1109
Hydrogen Chloride	Implement best work practices	15A NCAC 02D .1109
Filterable PM; or	0.37 pounds per ton of fired product; or 0.0021 grains per dry standard cubic foot; or	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Non-Mercury HAP Metals	0.11 pounds per hour	
Mercury	3.3E-04 pounds per ton of fired product; or 91 micrograms per dry standard cubic meter at 17% O <sub>2</sub> ; or 0.0019 pounds per hour	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Hydrogen Chloride Equivalent	57 pounds per hour	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ

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

a. Emissions of particulate matter from the brick tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**) shall not exceed an allowable emission rate as calculated by the following equation:

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

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.A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. To ensure compliance, the Permittee shall perform an inspection of the sawdust/natural gas-fired brick tunnel kiln in accordance with the following:
  - i. every six months, perform a visual inspection of the brick tunnel kiln emissions ductwork systems for leaks, holes, or disrepair; and
  - ii. every six months, perform a visual inspection of the brick tunnel kiln fuel combustion system.

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

# 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 Section 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Emissions of sulfur dioxide from the brick tunnel kilns (**ID No. ES-KS1 and ES-KS2**) 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 15A NCAC 02D .0516.

#### b. **Testing** [15A NCAC 02D .0508(f)]

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

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

No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of sawdust or natural gas in the brick tunnel kilns (ID Nos. ES-KS1 and ES-KS2).

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

a. Visible emissions from the brick tunnel kilns (**ID No. ES-KS1 and ES-KS2**) 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 02D .0508(f)]

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

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

c. To ensure compliance, once a month the Permittee shall observe the emission points of the brick tunnel kilns (**ID Nos. ES-K1 and ES-K2**) 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

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sources are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a 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 or 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0521 if records of the monitoring results 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 Section 2.1 A. 3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

## 4. 15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Brick Manufacturers

a. The initial compliance date for the emissions standards, work practice standards, and associated monitoring, recordkeeping, and reporting requirements listed below was <u>April 30, 2015</u>. The following conditions shall be included on the annual compliance certification.

#### Emissions Standards [15A NCAC 02D .1109]

- b. Emissions of the following regulated pollutants shall not exceed the emissions limits listed below:
  - i. Filterable PM:
    - The tunnel kilns (ID Nos. ES-KS1 and ES-KS2) shall comply with work practice standards.
  - ii. Hydrogen Fluoride:
    - The tunnel kilns (ID Nos. ES-KS1 and ES-KS2) shall comply with work practice standards.
  - iii. Hydrogen Chloride:
    - The tunnel kilns (ID Nos. ES-KS1 and ES-KS2) shall comply with work practice standards.

The Permittee shall follow the procedures in 15A NCAC 02D. 0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

# Work Practice Standards [15A NCAC 02Q .0508(f)]

- c. The Permittee shall perform annual inspection and maintenance of the tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**) as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
  - i. Conduct a visual inspection of the ductwork system for each tunnel kiln for leaks, holes, or disrepair; and,
  - ii. Inspect each burner, and clean or replace any components of the burner as necessary;
  - iii. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one inspection per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected tunnel kilns not inspected and maintained as required above.

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

d. The Permittee shall maintain records of the production rates on a fired-product basis for each affected tunnel kiln (ID Nos. ES-KS1 and ES-KS2). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

- e. The results of inspection and maintenance at the tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**) 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 of each recorded action;
  - ii. The results of each inspection; and,
  - iii. The results of any maintenance performed on the tunnel kilns.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

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

- f. The Permittee shall submit a Notification of Compliance Status within 60 days following the completion of the final required performance test. The Notification of Compliance Status must include the following information:
  - i. For the tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**), a summary of the initial inspection required in Section 2.1.A.4.c. of this permit;
- g. The Permittee shall submit a semi-annual 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. Company name, facility ID number, and address;
  - ii. Statement by the 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. For each deviation from a limitation (emission limit, operating limit, or work practice standard), include the following information:
    - (A) The total operating time of each affected source during the reporting period.
    - (B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If there were no deviations from any of the applicable limitations, a statement that there were no deviations during the reporting period.

#### 5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

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

- a. For the existing small tunnel kilns (ID Nos. ES-K1 and ES-K2) 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 comply with the CAA §112(j) standard in Section 2.1 A.4 through December 27, 2023. The Permittee shall be subject to the requirements of this standard starting <u>December 28, 2023</u>. Note that the requirements of this standard may require action on behalf of the Permittee prior to 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, 40 CFR 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 small tunnel kilns (**ID Nos. ES-K1 and ES-K2**). 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.

#### **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), 40 CFR 63.8(f)(4), and 40 CFR 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 the performance test required by Section 2.1 A.5.r.
- v. The Permittee shall submit a Notification of Compliance Status no later than 30 calendar days following the completion of a compliance demonstration required by Sections 2.1 A.5.ee through gg.
- 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, 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 2.1 A.5.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 2.1 A.5.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 2.1 A.5.p at all times.
- j. For each affected kiln that is subject to the emission limits specified in Sections 2.1 A.5.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 2.1 A.5.k through m. The OM&M plan shall be available for inspection by the delegated authority upon request.
- k. The OM&M plan must include, as a minimum, the following information:
  - i. Each process 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 2.1 A.5.n.i. through vii. The limits must be based on values of the monitored parameters recorded during performance tests.
  - iv. 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.
  - v. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.
  - vi. Continuous monitoring system performance evaluation procedures and acceptance criteria.
  - vii. Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in Sections 2.1 A.5.bb through dd, and 40 CFR 63.8(c)(1), (3), (7), and (8).
  - viii. 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).
  - ix. Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in Sections 2.1 A.5.00 through zz.

- x. 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.
- xi. Procedures for keeping records to document compliance.
- 1. 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).
- m. A new performance test is not required for the revision of the inspection and maintenance procedures in the OM&M plan.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the general compliance requirements in Section 2.1 A.5.g through m are not met.

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

- n. The Permittee shall meet each emission limit that applies for the tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**), including all process streams, as follows:
  - i. HF, HCl, and Cl<sub>2</sub> 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 2.1 A.5.y.ii.(1) and Section 2.1 A.5.z.i below.
  - ii. PM emissions must not exceed 0.37 pounds per ton of fired product; or
  - iii. PM emissions must not exceed 0.0021 grains per dry standard cubic foot at 17% O<sub>2</sub>; or
  - iv. Non-Hg HAP metals emissions must not exceed 0.11 pounds per hour.
  - v. Hg emissions must not exceed 3.3 E-04 pounds per ton of fired product; or
  - vi. Hg emissions must not exceed 91 micrograms per dry standard cubic meter at 17% O<sub>2</sub>; or
  - vii. Hg emissions must not exceed 0.0019 pounds per hour.
- o. The Permittee shall meet each operating limit that applies for the tunnel kilns (**ID Nos. ES-KS1 and ES-KS2**) 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 2.1 A.5.y and z.
- p. The Permittee shall meet each work practice standard that applies for the tunnel kilns (ID Nos. ES-KS1 and ES-KS2) 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 and temperature profile for each kiln and including them in the first compliance report as specified in Sections 2.1 A.5.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 temperature profile is attained.
  - iii. During periods of shutdown, minimize HAP emissions by not pushing loaded kiln cars into the kiln when the kiln temperature profile is no longer maintained
- q. To meet the emission limitations and operating limits in Sections 2.1 A.5.n and o, the Permittee shall do the following:
  - i. 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 2.1 A.5.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 2.1 A.5.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 2.1 A.5.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 2.1 A.5.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. ES-KS1 and ES-KS2**) according to the following requirements:
  - i. Select the locations of sampling ports and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A. Sampling sites must be located prior to any releases to the atmosphere for all affected sources.
  - ii. Determine the velocities and volumetric flow rate using Method 2 of 40 CFR Part 60 Appendix A. Method 2A, 2C, 2D, or 2F of 40 CFR Part 60 Appendix A, or Method 2G of 40 CFR Part 60 Appendix A may be used, as appropriate, as an alternative to using Method 2 of 40 CFR Part 60 Appendix A.
  - iii. Conduct a gas molecular weight analysis using Method 3 of 40 CFR Part 60 Appendix A. Method 3A or 3B of 40 CFR Part 60 Appendix A may be used, as appropriate, as an alternative to using Method 3 of 40 CFR Part 60 Appendix A.
  - iv. Measure the moisture content of the stack gas using Method 4 of 40 CFR Part 60 Appendix A.
  - v. Measure HF, HCl, and Cl<sub>2</sub> emissions using Method 26A or Method 320 of 40 CFR Part 60 Appendix A.
    - (A) The test must be conducted while operating at the maximum production level.
    - (B) Method 26 of 40 CFR Part 60 Appendix A may be used as an alternative to Method 26A when no acid PM (e.g. HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present.
    - (C) When using Method 320 of 40 CFR Part 60 Appendix A, the analyte spiking procedures of Method 13 of 40 CFR Part 60 Appendix A must be followed unless you can demonstrate that the complete spiking procedure has been conducted at a similar source.
  - vi. Measure PM or non-Hg HAP metals emissions using Method 5 (PM only) or Method 29 of 40 CFR Part 60 Appendix A. The test must be conducted while operating at the maximum production level.
  - vii. Measure Hg emissions using Method 29 of 40 CFR Part 60 Appendix A. The test must be conducted while operating at the maximum production level.
  - viii. Establish the operating limit(s) for the kiln process rate if the total HCl-equivalent emissions are greater than the HCl-equivalent limit in Section 2.1 A.5.o. The maximum process rates for each kiln at the facility must be determined using the procedures in Sections 2.1 A.5.y and z that would ensure that the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rate(s) would become the site-specific process rate operating limit(s).
  - ix. Determine the production rate during each PM/Hg test run, then, using the procedures given in Section 2.1 A.5.y.i, determine compliance with PM and/or Hg production-based emission limits. The production rate, on a fired-product basis, of the affected source for each of the three test runs must be measured and recorded.
- 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 2.1 A.5.y and z 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 2.1 5.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<sub>2</sub>) for use in Equations 4 and 6, below.

$$MP = \frac{ER}{P}$$
 (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 2.1 A.5.n.i, the Permittee

shall.

(1) calculate the HCl-equivalent emissions for HF, HCl, and Cl2 for each tunnel kiln using Equation 2 below:

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

Where:

E<sub>i</sub> = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

E<sub>HCl</sub> = emissions of HCl, kilograms (pounds) per hour

E<sub>HF</sub> = emissions of HF, kilograms (pounds) per hour

 $E_{C12}$  = emissions of  $Cl_2$ , kilograms (pounds) per hour

RfC<sub>HCl</sub> = reference concentration for HCl, 20 micrograms per cubic meter

RfC<sub>HF</sub> = 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:

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

- (3) Compare this value to the health-based standard for acid gas HAP in Section 2.1 A.5.n.i.
- z. The Permittee shall establish each site-specific operating limit in Section 2.1 A.5.o.ii according to the following specifications:
  - i. Calculate the maximum potential HCl-equivalent emissions for HF, HCl, and Cl<sub>2</sub> for each tunnel kiln using Equation 4:

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

Where:

 $E_{\text{max i}} = \text{maximum potential HCl-equivalent emissions for kiln i in pounds per hour}$ 

Capi = design capacity for kiln i, in tons of fired product per hour

MP<sub>iHCl</sub> = mass of HCl per unit of production for kiln i, in pounds of HCl per ton of fired product

MP<sub>iHF</sub> = mass of HF per unit of production for kiln i, in pounds of HF per ton of fired product

 $MP_{IC12}$  = mass of  $Cl_2$  per unit of production for kiln i, in pounds of  $Cl_2$  per ton of fired product

RfC<sub>HCl</sub> = reference concentration for HCl, 20 micrograms per cubic meter

RfC<sub>HF</sub> = reference concentration for HF, 14 micrograms per cubic meter

 $RfC_{C12}$  = 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:

$$E_{\max total} = \sum_{i=1}^{n} E_{\max i}$$
 (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 ( $E_{max\,i}$ ) are greater than the HCl-equivalent limit in Section 2.1 A.5.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.

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

Where:

 $P_{\text{max i}} = \text{maximum process rate for kiln i in tons per hour}$ 

HCl-eq = HCl-equivalent limit in Section 2.1 A.5.n (57 pounds per hour)

MP<sub>iHCl</sub> = mass of HCl per unit of production for kiln i in pounds of HCl per ton of fired product

MP<sub>iHF</sub> = mass of HF per unit of production for kiln i in pounds of HF per ton of fired product

MP<sub>iCl2</sub> = mass of Cl2 per unit of production for kiln i in pounds of Cl2 per ton of fired product

RfC<sub>HCl</sub> = reference concentration for HCl (20 micrograms per cubic meter)

RfC<sub>HF</sub> = reference concentration for HF, 14 micrograms per cubic meter

RfC<sub>Cl2</sub> = reference concentration for  $Cl_2$ , 0.15 micrograms per cubic meter

- iv. For multiple tunnel kilns, if the total facility maximum potential HCl-equivalent emissions (E<sub>max total</sub>) are greater than the HCl-equivalent limit in Section 2.1 A.5.n.i, determine the combination of maximum process rates that would ensure that total facility maximum potential HCl-equivalent emissions remain 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 2.1 A.5.n and is using process changes as a means of meeting the emission limits, 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 2.1 A.5.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 2.1 A.5.r through an 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 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.
- dd. Requests for approval of alternate monitoring procedures shall meet the requirements in Section 2.1 A.5.aa and 40 CFR 63.8(f).

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 2.1 A.5.bb. through dd. above.

#### **Initial Compliance Requirements** [40 CFR 63.8455]

- ee. The Permittee shall demonstrate initial compliance with each emission limitation and work practice standard in Sections 2.1 A.5.n and p according to the following requirements:
  - i. The HF, HCl, and Cl<sub>2</sub> emissions are measured for each kiln using Method 26 or 26A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A; and
  - ii. The HCl-equivalent emissions are calculated for each kiln using Equation 2 in Section 2.1 A.5.y.ii.(1); and
  - iii. The HCl-equivalent values are summed for all kilns using Equation 3 in Section 2.1 A.5.y.ii.(2); and
  - iv. The facility total HCl-equivalent emissions do not exceed the emission limit of 57 pounds per hour.
  - v. The PM emissions measured using Method 5 or Method 29 of 40 CFR Part 60, Appendix A, over the period of the initial performance test, according to Equation 1 in Section 2.1 A.5.y.i, do not exceed the emission limit of 0.37 pounds per ton of fired product or 4.8 milligrams per dry standard cubic meter at 17% O<sub>2</sub>, and
  - vi. The applicable operating limits listed in Section 2.1 A.5.o.ii have been established and recorded over the 3-hour performance test during which PM emissions did not exceed the emission limit of 0.37 pounds per ton of fired product or 4.8 milligrams per dry standard cubic meter at 17% O<sub>2</sub>; or
  - vii. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR Part 60, Appendix A, over the period of the initial performance test, according to Equation 1 in Section 2.1 A.5.y.i, do not exceed the emission limit of 0.11 pounds per hour; and
  - viii. The applicable operating limits listed in Section 2.1 A.5.o.ii have been established and recorded over the 3-hour performance test during which non-Hg metals emissions did not exceed the emission limit 0.11 pounds per hour.
  - ix. The Hg emissions measured using Method 29 of 40 CFR Part 60, Appendix A, over the period of the initial performance test, according to Equation 1 in Section 2.1 A.5.y.i, do not exceed the emission limit of 3.3 E-04 pounds per ton of fired product or 91 micrograms per dry standard cubic meter at 17% O<sub>2</sub> or 0.0019 pounds per hour; and
  - x. The applicable operating limits listed in Section 2.1 A.5.o.ii have been established and recorded over the 3-hour performance test during which Hg emissions did not exceed the emission limit of 3.3 E-04 pounds per ton of fired product or 91 micrograms per dry standard cubic meter at 17% O<sub>2</sub> or 0.0019 pounds per hour.
- ff. The Permittee shall establish each site-specific operating limit listed in Section 2.1 A.5.o.ii according to the requirements in Sections 2.1 A.5.y through aa.
- gg. The Permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Sections 2.1 A.5.f.v and vi.

  The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the initial compliance requirements are not met as stated in Section 2.1 A.5.ee through gg above.

#### Continuous Compliance Requirements [40 CFR 63.8465, 40 CFR 63.8470]

- hh. The Permittee shall monitor and collect data according to Sections 2.1 A.5.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, 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 2.1 A.5.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 2.1 A.5.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 2.1 A.5.n.i, the Permittee must collect the kiln process rate data and reduce the kiln process rate data to a 3-hour block average according to Section 2.1 A.5.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 2.1 A.5.z.
  - iii. The Permittee must 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 must maintain records of burner tune ups used to demonstrate compliance with the dioxin/furan work practice standard.
  - v. The Permittee must submit a report of the most recent tune up for each tunnel kiln conducted with the compliance report.

- II. Each instance in which the Permittee did not meet each emission limit and each operating limit shall be reported. These instances are deviations from the emission limitations and operating limitations in Sections 2.1 A.5.n and o. These deviations must be reported according to the requirements in Section 2.1 A.uu.ii.
- mm. **VE testing.** The Permittee shall demonstrate continuous compliance with the operating limits in Section 2.1 A.5.o.i for visible emissions (VE) from tunnel kilns that are uncontrolled 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 2.1 A.5.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, these deviations shall be reported by following the requirements in Section 2.1 A.5.uu.ii.
- nn. **Alternative to VE testing.** In lieu of meeting the requirements of Section 2.1 A.5.mm, the Permittee 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 2.1 A.5.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 2.1 A.5.hh through nn above.

#### Recordkeeping Requirements [40 CFR 63.8490, 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 2.1 A.5.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 2.1 A.5.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 burner tune-ups used to comply with the dioxin/furan work practice standards for tunnel kilns in Section 2.1 A.5.p.i.
  - vi. 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 temperature profile is attained.
    - (C) For periods of shutdown, the kiln push rate and kiln exhaust temperature after the time the kiln temperature profile is no longer maintained.

- vii. All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Section 2.1 A.5.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 2.1 A.5.00. through tt.

#### **Reporting Requirements** [40 CFR 63.8485]

- uu. The Permittee must submit a compliance report semiannually according to the requirements in Section 2.1 A.5.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 2.1 A.5.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 2.1 A.5.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 source in Section 2.1 A.5.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.
  - v. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates in paragraphs (i) through (iv) of this section.
- 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 report of the most recent burner tune-up conducted to comply with the dioxin/furan work practice standard in Section 2.1 A.5.p.i.
  - v. 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.
  - vi. 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.
  - vii. The first compliance report must contain the startup push rate and the temperature profile for each kiln.
  - 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, and malfunction.
  - 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 2.1 A.5.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 2.1 A.5.uu. through zz.

# B. One sawdust rotary dryer (ID No. ES-SD1) and associated cyclone (ID No. CD-SD1) One sawdust rotary dryer (ID No. ES-SD2) and associated cyclone (ID No. CD-SD2)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate	E=4.10 x $P^{0.67}$ , for process rates $\leq 30$ tons per hour, OR	15A NCAC 02D .0515
Matter	$E=55 \times P^{0.11} - 40$ , for process rates > 30 tons per hour	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
Visible	20 percent opacity	15A NCAC 02D .0521
Emissions		
Toxic Air	State-enforceable only	15A NCAC 02D .1100
Pollutants	See Section 2.1 B.3	
Toxic Air	State-enforceable only	15A NCAC 02Q .0711
Pollutants	See Section 2.1 B.4	
Odors	State-enforceable only	15A NCAC 02D .1806
	Control of odorous emissions	
	See Section 2.2 A.1	

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

a. Emissions of particulate matter from these sources (**ID Nos. ES-SD1 and ES-SD2**) shall not exceed an allowable emission rate as calculated by the following equation:

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

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

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

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

b. If 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 the sawdust rotary dryers (ID No. ES-SD1 and ES-SD2) shall be controlled by associated cyclones (ID Nos. CD-SD1 and CD-SD2) during all sawdust drying operations. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the cyclone manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's 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) external inspection of the cyclone's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and cyclone 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 Section(s) 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 .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the sawdust rotary dryers (**ID No. ES-SD1 and ES-SD2**) 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.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of the sawdust rotary dryers (ID Nos. ES-SD1 and ES-SD2) 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.2.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 or 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 log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0521, if records of the monitoring results 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.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.

#### State-enforceable only

#### 3. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limit
Sawdust Dryer (ID No. ES-SD1)	Arsenic Benzene Cadmium Fluorides  Formaldehyde Hydrogen Fluoride  Hydrogen Chloride Manganese Nickel	1.38 lb/yr 36.74 lb/yr 1.44 lb/yr 0.96 lb/hr 15.38 lb/day 0.055 lb/hr 1.6 lb/hr 25.7 lb/day 1.4 lb/hr 0.063 lb/day 0.005 lb/day
Sawdust dryer (ID No. ES-SD2)	Arsenic Benzene Cadmium Fluorides Formaldehyde Hydrogen Fluoride Hydrogen Chloride Manganese Nickel	1.17 lb/yr 31.19 lb/yr 1.23 lb/yr 0.82 lb/hr 19.6 lb/day 0.05 lb/hr 1.36 lb/hr 32.73 lb/day 1.19 lb/hr 0.08 lb/day 0.0057 lb/day

- b. To ensure compliance with the above limits, the following restrictions shall apply:
  - i. The drying rate for sawdust dryers (ID Nos. ES-SD1 and ES-SD2) shall not exceed 3.75 tons per hour each.
- c. For compliance purposes, within 30 days after each calendar year quarter the following shall be reported to the Regional Supervisor, DAQ:
  - i. The highest sawdust dryer (ID Nos. ES-SD1 and ES-SD2) drying rates during the quarter.

#### State-enforceable only

#### 4. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

- a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
- b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."
- c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
- d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant	CAS No.	Carcinogens (lb/yr)	Chronic Toxicant (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acrylonitrile	107-13-1	10			
Beryllium	7440-41-7	0.28			
Carbon disulfide	75-15-0		3.9		
Carbon tetrachloride	56-23-5	460			
Chloroform	67-66-3	290			
Soluble chromate compounds, as chromium (VI) equivalent			0.013		
Cresol	1319-77-3			0.56	
Di(2-ethylhexyl)phthalate	117-81-7		0.63		
Mercury, aryl and inorganic compounds			0.013		
Methyl chloroform	71-55-6		250		64
Methylene chloride	75-09-2	1,600			
Methyl ethyl ketone	78-93-3		78		22.4
Perchloroethylene	127-18-4	13,000			
Phenol	108-95-2			0.24	
Styrene	100-42-5			2.7	
Toluene	108-88-3		98		14.4
Trichlorofluoromethane	75-35-4				140
Xylene	1330-20-7		57		16.4



C. One shale/clay grinding and screening operation (ID No. F-GR) consisting of one single roll crusher (ID No. F-CR1), one dry pan (ID No. F-DP), one single screen (ID No. F-S1), two double deck screens (ID Nos. F-DDS1 and F-DDS2), and one hammermill (ID No. F-HM1)<sup>1</sup>

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

Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Odors	State-enforceable Only	15A NCAC 02D .1806
	Control of odorous emissions	
	See Section 2.2 A.1	

#### 1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the grinding and screening operation (**ID No. F-GR**) 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.1.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 this source (**ID No. F-GR**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.1. a. above.

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

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

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

The Permittee shall be deemed in non-compliance with 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.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.

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

# A. All emission sources

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

Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only	15A NCAC 02D .1806
	Odorous emissions must be controlled	

# State-enforceable only

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

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



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

Emission Source ID No.	Emission Source Description <sup>1,2</sup>
IES-6	Brick sanding operations controlled by a bagfilter (ID No. CD-6) vented in a building enclosure
IES-D1, IES-D2, and IES-D3	Three brick dryers heated by the exhaust from the brick tunnel kiln
IES-7	Brick crusher
I-1	Natural gas-fired sand dryer which exhausts inside grinding room
I-2	One brick dryer heated by the exhaust from the brick tunnel kiln (ID No. ES-KS2)
I-3	RMP conveyor

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

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



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

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

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

- 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 DAO.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

# B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

## C. Severability Clause [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

#### D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

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

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

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

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

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

#### 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 020 .0514]
  - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q 0505
- 3. Minor Permit Modifications [15A NCAC 02Q .0515]
  - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- 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:
    - 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;
    - 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)]

- "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:

- Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate
  rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a
  malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A
  NCAC 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

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

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

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

- c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
- d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

# K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration 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.
- A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

#### S. <u>Termination, Modification, and Revocation of the Permit</u> [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(1) 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:
  - enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

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

#### W. Annual Fee Payment [15A NCAC 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

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

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

#### Y. Confidential Information [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

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

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

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

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

#### BB. Financial Responsibility and Compliance History [15A NCAC 02Q .0507(d)(3)]

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

#### CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 02Q .0501(d)]

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

#### DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 02Q .0508(h)]

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

#### 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.
  - 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:
  - 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.

