



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Michael F. Easley, Governor

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

December 11, 2007

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

Dear Brown:

SUBJECT: Air Quality Permit No. 08179T07
Facility ID: 06/04/00043
Triangle Brick Company - Wadesboro
Wadesboro, North Carolina
Anson County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for an administrative amendment of a Title V permit received October 2, 2007, we are forwarding herewith Air Quality Permit No. 08179T07 to Triangle Brick Company, Wadesboro, Anson County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Permitting Section

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

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Mr. Howard P. Brown
December 11, 2007
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Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108 and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

This Air Quality Permit shall be effective from December 11, 2007 until May 31, 2012* is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Michael Smithwick at (919) 715-6247.

Sincerely yours,

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

Enclosure

c: Gregg Worley, EPA Region 4, Permit only
Fayetteville Regional Office
Central Files

*This permit shall expire on the earlier of May 31, 2012 or the date the renewal of Permit No. 08179T06 has been issued or denied.

Insignificant Activities

Pursuant to 15 NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-Tank	3,000 gallon above ground gasoline storage tank

Summary of Changes to Permit

The following changes were made to the Triangle Brick Company - Wadesboro Air Permit. New Permit No. 08179T07

Page(s)	Section	Description of Change(s)
Attachments	-	- Updated attachment summarizing changes to the Permit. - Provided an ID No. (IS-Tank) to the insignificant gasoline storage tank
1	Cover Page	- Updated Permit revision numbers and included special language for Permit expiration. - Updated Permit issuance date.
3 - 39	All, Header	- Updated Permit revision number.
4	Part I, Section 1, equipment listing	- Removed references to MACT - 40 CFR Part 63 Subpart JJJJJ in the kilns source description
7	Part I, Section 2.1 A	- Removed reference to MACT - 40 CFR Part 63 Subpart JJJJJ in the specific limitations and conditions summary table
8	Part I, Section 2.1 A.3	- Updated the 2D .0521 Condition
18	Part I, Section 2.1 G	- Removed references to MACT - 40 CFR Part 63 Subpart JJJJJ in the specific limitations and conditions summary table
18	Part I, Section 2.1 G	- Added 2D .0515 and 2D .0521 Conditions to the specific limitations and conditions summary table as the MACT JJJJJ PM and visibility requirements are no longer applicable
18 - 19	Part I, Section 2.1 G.1	- Added a 2D .0515 Condition as the MACT JJJJJ PM requirements are no longer applicable
19 -20	Part I, Section 2.1 G.3	- Added a 2D .0521 Condition as the MACT JJJJJ visibility requirements are no longer applicable
27	Part I, Section 2.2 D (removed)	- Removed the MACT JJJJJ Condition
27 -35	Part I, Section 3	- Updated General Conditions
36	Part II, Sections 1 and 2	- Updated Shell language
36 - 38	Part II, Section 3	- Updated General Conditions

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



Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
08179T07	08179T06	December 11, 2007	*see note below

*This permit shall expire on the earlier of May 31, 2012 or the date the renewal of Permit No. 08179T06 has been issued or denied.

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, and to construct, as outlined in Part II, the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Triangle Brick Company - Wadesboro**
Facility ID: **06/04/00043**

Facility Site Location: **US Highway 52**
City, County, State, Zip: **Wadesboro, Anson County, North Carolina 28170**

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

Application Number: **0400043.07A**
Complete Application Date: **October 2, 2007**

Primary SIC Code: **3251**
Division of Air Quality, **Fayetteville Regional Office**
Regional Office Address: **225 Green Street – Suite 714, Systel Building**
Fayetteville, North Carolina 28301-5043

Permit issued this the 11th day of December, 2007

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

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ATTACHMENT

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PART I

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

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

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Two Brick Tunnel Kilns			
K-1	One natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (29.0 tons per hour material output rate, 42.8 million Btu per hour heat input rate)	CD-K1**	Dry Limestone Adsorber (DLA)
K-2*	One natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (29.0 tons per hour material output rate, 42.8 million Btu per hour heat input rate)	CD-K2*	Dry Limestone Adsorber (DLA)
Rotary Coatings Dryer			
SD-1	One natural gas-fired Rotary Coatings Dryer (8.1 tons of clay per hour material input rate, 0.3 million Btu per hour heat input rate) NSPS - 40 CFR Part 60 Subpart UUU	N/A	N/A
Primary Crushing Plant and Associated Conveyances			
PC-1 and PC-2	Two shale feeders	N/A	N/A
PC-3 and PC-4	Two scalp screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
PC-5 and PC-6	Two jaw crushers NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
PC-7	One conveyor under PC-3 and PC-5 NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
PC-8	One conveyor under PC-4 and PC-6 NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
PC-9	One cross-over conveyor NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
PC-10	One shuttle conveyor NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Two Secondary Clay Grinding Plants and Associated Conveyances			
CG-1	One clay feeder	N/A	N/A
CG-2	One conveyor belt to scalping screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-3	One scalping screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-4	One return conveyor belt for oversize from screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-5	One conveyor belt to hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-6	One hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-7	One conveyor belt under hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-8	One conveyor belt to finish screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-10 through CG-13	Four finish screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-14	One fines conveyor belt under screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-15	One conveyor belt to storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-16	One conveyor belt over storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-17 through CG-21	Five storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-22 through CG-26	Five feeders under storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-27	One conveyor in front of storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-28	One conveyor to pug mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-29*	One clay feeder	N/A	N/A
CG-30*	One conveyor belt to scalping screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-31*	One scalping screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-32*	One return conveyor belt for oversize from screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-33*	One conveyor belt to hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-34*	One hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-35*	One conveyor belt under hammer mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A

CG-36*	One conveyor belt to finish screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
CG-37 through CG-40*	Four finish screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-41*	One fines conveyor belt under screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-42*	One conveyor belt to storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-43*	One conveyor belt over storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-44 through CG-48*	Five storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-49 through CG-53*	Five feeders under storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-54*	One conveyor in front of storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
CG-55*	One conveyor to pug mill NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
Loam/ Sawdust Preparation Operation and Associated Conveyances			
LS-1	Loam/ sawdust feeder	N/A	N/A
LS-2	One conveyor from loam/ sawdust feeder to finish screens NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-3	One loam screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-4	One loam crusher NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-5	One oversize return conveyor from LS-3 NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-6	One oversize return chute NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-7	One fines conveyor belt under LS-3 to bunker belt conveyor NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-8	One belt conveyor to bunker NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-9	One storage bunker NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-10	One sawdust screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-11	One conveyor to storage bins NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A
LS-12	One oversize conveyor from sawdust screen NSPS - 40 CFR Part 60 Subpart OOO	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Above Ground Storage Tanks			
T-1	One 24,000 gallon above ground No. 6 fuel oil storage tank NSPS - 40 CFR Part 60 Subpart Kb	N/A	N/A
T-2 and T-3	Two 24,000 gallon above ground No. 2 fuel oil storage tanks NSPS - 40 CFR Part 60 Subpart Kb	N/A	N/A
T-4	One 24,000 gallon above ground highway diesel fuel oil storage tank NSPS - 40 CFR Part 60 Subpart Kb	N/A	N/A
T-5	One 24,000 gallon above ground Additive "A" storage tank NSPS - 40 CFR Part 60 Subpart Kb	N/A	N/A

* These emission sources (ID Nos. K-2, CD-K2 and CG-29 through CG-55) are permitted as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply.

**The control device (ID No. CD-K1) is permitted as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply.

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 natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (ID No. K-1, 29.0 tons per hour material output rate, 42.8 million Btu per hour maximum heat input rate) and associated dry limestone adsorber (ID No. CD-K1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E=4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
sulfur dioxide	2.3 pounds per million Btu	15A NCAC 2D .0516
	Less than 250 tons per year; See Section 2.2 (B)	15A NCAC 2Q .0317 (Avoidance of 2D .0530)
visible emissions	20 percent opacity	15A NCAC 2D .0521
odorous emissions	See Section 2.2 (A)(1); State-enforceable only	15A NCAC 2D .1806

toxic air pollutants	See Section 2.2 (A)(2); State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 (A)(3); State-enforceable only	15A NCAC 2Q .0711

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

- a. Emissions of particulate matter from the brick tunnel kiln (**ID No. K-1**) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

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

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

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

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

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

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

- c. To assure compliance, the Permittee shall perform an inspection of the natural gas/No. 2 fuel oil/ No. 6 fuel oil fired brick tunnel kiln in accordance with the following:
 - i. every six months, perform a visual inspection of the brick tunnel kiln’s emissions ductwork system for leaks, holes, or disrepair; and
 - ii. every six months, perform a visual inspection of the tunnel brick kiln’s fuel combustion system.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

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

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in non-compliance with 2.1 A.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit, in writing a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from the brick tunnel kiln (**ID No. K-1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

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

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

A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the combustion of natural gas/ No. 2 fuel oil in this source.
- d. No more than 216 of the 310 burners of brick tunnel kiln (ID No. K-1) shall be fired with No. 6 fuel oil at one time because the preheat section (94 burners) of the kiln is only capable of firing natural gas and No. 2 fuel oil.
- e. The maximum sulfur content of any No. 6 fuel oil received and burned in the brick tunnel kiln (**ID No. K-1**) shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit. [15A NCAC 2Q .0508(bb)]
- f. To assure compliance, the Permittee shall monitor the sulfur content and Btu content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
 - i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the fuel oil received during the quarter;
 - iii. the method used to determine the maximum sulfur content of the fuel oil; and
 - iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the No. 6 fuel oil is not monitored and recorded.

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

- a. Visible emissions from this tunnel brick kiln (**ID No. K-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2D .0501(c)(8)]

- b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month, the Permittee shall observe the emission points of this source 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 the 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 sources in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 A.3.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in non-compliance with 2.1 A.3.a. if records of the monitoring results are not maintained.

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

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

B. One natural gas-fired Rotary Coatings Dryer (ID No. SD-1, 8.1 tons of clay per hour material input rate, 0.3 million Btu per hour heat input rate)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
particulate matter <i>and</i> visible emissions NSPS-UUU	Potential emissions of particulate matter from the rotary coatings dryer shall not exceed 0.057 g/dscm (0.025 gr/dscf), <i>and</i> visible emissions shall not exceed 10% opacity.	15A NCAC 2D .0524 (40 CFR 60 Subpart UUU)
odors	Odorous emissions must be controlled - Section 2.2 (A)(1); State-enforceable only	15A NCAC 2D .1806

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

Regulatory Requirement

- a. Emissions of sulfur dioxide from the rotary coatings dryer shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516(a)]

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

- b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

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

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

Regulatory Requirement

- a. As required by 40 CFR 60.732, on and after the date on which the performance test required to be conducted

by 40 CFR 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first, no emissions shall be discharged into the atmosphere from any affected facility that:

- i. contain particulate matter in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and
 - ii. exhibit greater than 10 percent opacity.
- b. As required by 40 CFR 60.11(c), the opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard
- c. As required by 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- d. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.730, Subpart UUU, including Subpart A "General Provisions."

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

- e. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.730, Subpart UUU), 15A NCAC 2D .0501(c)(3), (c)(8), and (c)(18) and General Condition JJ, has been or will be performed when determining compliance of each individual affected facility with 40 CFR 60.732. If test results exceed the applicable limit(s) as given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- f. In conducting the performance tests required in by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- g. In determining compliance with the particulate matter standards in 40 CFR 60.732, **see Section 2.1 B.2.a. above**, the Permittee shall determine compliance as follows:
- i. 40 CFR Part 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
 - ii. 40 CFR Part 60, Appendix A, Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions.
- h. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- i. To assure compliance with 40 CFR 60.730(b) (see section 2.1 B.2.a.ii. above) the Permittee shall observe, on a daily basis, emissions from the rotary coatings dryer for any visible emissions. Should visible emissions be observed, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**, an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.730 (Subpart UUU), **see Section 2.1 B.2.h. above**, is performed and visible emissions are demonstrated to comply with the applicable limit given in 40 CFR 60.732(b) [10% opacity]. If compliance cannot be demonstrated, then each affected facility for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 2D .0524 and 40 CFR 60.730.
- j. The results of performance evaluations, discussed above in Section 2.1 B.2.i. shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The log shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not

maintained.

- k. To assure compliance with the requirements of 40 CFR 60.732(a) (see Section 2.1 B.2.a.i. above), the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for each affected facility in the coatings drying operations. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a semi-annual internal inspection of the units that comprise the rotary coatings dryer for deterioration, damage, and leaks

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the affected facilities and duct work of the rotary coatings dryer are not visually inspected.

- l. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the rotary coatings dryer is not inspected and maintained. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of any maintenance performed on the rotary coatings dryer; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

- m. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

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

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

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

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions NSPS - OOO	10 percent opacity at each affected facility, except for the jaw crushers that are subject to the 15 percent opacity standard.	15A NCAC 2D .0524 (40 CFR 60 Subpart OOO)
odors	See Section 2.2 (A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 2D .1806

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

Emission Standard(s) [15A NCAC 2D .0524].

- a. For NSPS affected facilities subject to the 10 percent and 15 percent opacity limits, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) from each individual affected facility. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

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

- b. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 2D .0524 (40 CFR 60.670, Subpart OOO), 15A NCAC 2D .0501(c)(8) and (18) and General Condition JJ, has been or will be performed when determining compliance of each individual affected facility with 40 CFR 60.672(a), (b) and (c). If test results exceed the applicable limit(s) as given in Section 2.1 C.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- c. Monitoring to assure compliance with the applicable emissions standard(s) of 2.1 C.1.a. shall be performed by the Permittee as follows:
- i. observation of an individual affected facility:
 - A. observe each individual affected facility each month for any visible emissions which exceed "normal". The Permittee shall establish "normal" emissions within thirty (30) days of permit effective date by observing each week for thirty (30) days the emissions from each enclosed affected facility. Should monthly observed emissions of an affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**,
 - B. an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:
- i. the results of the Permittee's observations to establish normal;
 - ii. the results of the Permittee's monthly opacity emissions observations for each affected facility; and
 - iii. the observations to establish normal should be recorded for each affected facility;
 - iv. the date and time of each observation, and
 - v. if any emissions were observed which exceeded "normal", the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and

- vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with 2.1 C.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
 - i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - iii. a report of any non-complying emissions for all emissions which exceed the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 compliance demonstrations conducted on an affected facility, along with the determined cause of exceedance and the resulting corrective action taken.

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

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions NSPS - OOO	7 percent opacity for stack emission sources, 15 percent opacity for crushers, or 10 percent opacity at each belt conveyor and other affected facilities, OR “no visible emissions” from the building enclosing the affected facilities	15A NCAC 2D .0524 (40 CFR 60 Subpart OOO)
odors	See Section 2.2 (A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 2D .1806

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

Emission Standard(s) [15A NCAC 2D .0524]

- a. For the NSPS affected facilities within the building subject to a 10 or 15 percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of “no visible emissions” from the unvented building. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

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

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

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

- c. Monitoring to assure compliance with the applicable emissions standard(s) of 2.1 D.1.a. shall be performed by the Permittee as follows:

i. observation of a building enclosure containing affected facilities:

- A. observe the building containing the clay grinding plant each month for any fugitive visible emissions. Should any visible emissions be observed, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 2D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
- B. an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **OR**

ii. observation of an individual affected facility enclosed in the building:

- A. After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed “normal”. The Permittee shall establish “normal” emissions within thirty (30) days of permit effective date by observing each week for thirty (30) days the emissions from each enclosed affected facility. Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**,
- B. an approved Method 9 (or Method 22 if observing an affected facilities building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:

- i. the results of the Permittee’s observation to establish normal;
- ii. the results of the Permittee’s monthly building fugitive emissions observation or the monthly opacity emissions observations for each affected facility;
- iii. if option 2.1 D.1.c.ii.A. is followed, the observation to establish normal should be recorded for each affected facility within the building.
- iv. whether the observed emissions source was the building or each affected facility within the building, the

- date and time of each observation, and
- v. if any emissions were observed from the building or whether any emissions observed exceeded “normal”, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
- vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with 2.1 D.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
 - i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - iii. a report of any noncomplying emissions for all emissions which exceed the “no visible emission” limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

E. One loam/sawdust preparation area consisting of:

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions NSPS - OOO	7 percent opacity for stack emission sources, 15 percent opacity for crushers, or 10 percent opacity at each belt conveyor and other affected facilities, OR “no visible emissions” from the building enclosing the affected facilities	15A NCAC 2D .0524 (40 CFR 60 Subpart OOO)
toxic air pollutants	See Section 2.2 (A)(2); State enforceable only	15A NCAC 2D .1100
	See Section 2.2 (A)(3); State-enforceable only	15A NCAC 2Q .0711
odors	See Section 2.2 (A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 2D .1806

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

Emission Standard(s) [15A NCAC 2D .0524].

- a. For the NSPS affected facilities within the building subject to a 10 or 15 percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of “no visible emissions” from the unvented building. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

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

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

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

- c. Monitoring to assure compliance with the applicable emissions standard(s) of 2.1 E.1.a. shall be performed by the Permittee as follows:
- i. observation of a building enclosure containing affected facilities:
- A. observe the building containing the clay grinding plant each month for any fugitive visible emissions. Should any visible emissions be observed, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 2D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
- B. an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **OR**
- ii. observation of an individual affected facility enclosed in the building:
- A. After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed “normal”. The Permittee shall establish “normal” emissions within thirty (30) days of permit effective date by observing each week for thirty (30) days the emissions from each enclosed affected facility. Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**,
- B. an approved Method 9 (or Method 22 if observing an affected facilities building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:
 - i. the results of the Permittee’s observation to establish normal;
 - ii. the results of the Permittee’s monthly building fugitive emissions observation or the monthly opacity emissions observations for each affected facility;
 - iii. if option 2.1 E.1.c.ii.A. is followed, the observation to establish normal should be recorded for each affected facility within the building.
 - iv. whether the observed emissions source was the building or each affected facility within the building, the date and time of each observation, and
 - v. if any emissions were observed from the building or whether any emissions observed exceeded “normal”, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
 - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with 2.1 E.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
 - i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - iii. a report of any noncomplying emissions for all emissions which exceed the “no visible emission” limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

F. Four above ground storage tanks including:

- One 24,000 gallon above ground No. 6 fuel oil storage tank (ID No. T-1);**
- Two 24,000 gallon above ground No. 2 fuel oil storage tanks (ID Nos. T-2 and T-3);**
- One 24,000 gallon above ground highway diesel fuel oil storage tank (ID No. T-4); and**
- One 24,000 gallon above ground Additive “A” storage tank (ID No. T-5)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
N/A	recordkeeping - dimension and capacity of storage vessel	15A NCAC 2D .0524 (40 CFR 60 Subpart Kb)
NSPS - Kb		

1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60 SUBPART Kb)

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

- a. The Permittee shall comply with the recordkeeping requirements of this standard by maintaining readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. All records shall be kept for the life of the source. These sources are exempt from the General

Provisions (40 CFR Part 60, Subpart A) and from any other provisions of Subpart Kb.

G. One natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (ID No. K-2*, 29.0 tons per hour material output rate, 42.8 million Btu per hour maximum heat input rate) and associated dry limestone adsorber (ID No. CD-K2*)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E=4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
sulfur dioxide	2.3 pounds per million Btu	15A NCAC 2D .0516
	Less than 250 tons per year; See Section 2.2 (C)	15A NCAC 2Q .0317 (Avoidance of 2D .0530)
visible emissions	20 percent opacity	15A NCAC 2D .0521
odorous emissions	See Section 2.2 (A)(1); State-enforceable only	15A NCAC 2D .1806
toxic air pollutants	See Section 2.2 (A)(2); State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 (A)(3); State-enforceable only	15A NCAC 2Q .0711

* These emission source(s) (ID No(s). K-2 and CD-K2) are permitted as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply.

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

Emission Standard

- a. Emissions of particulate matter from the brick tunnel kiln (**ID No. K-2**) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

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

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

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

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

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

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

- c. To assure compliance, the Permittee shall perform an inspection of the natural gas/No. 2 fuel oil/ No. 6 fuel oil fired brick tunnel kiln in accordance with the following:
 - i. every six months, perform a visual inspection of the brick tunnel kiln's emissions ductwork system for leaks, holes, or disrepair; and
 - ii. every six months, perform a visual inspection of the tunnel brick kiln's fuel combustion system.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

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

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

The Permittee shall be deemed in non-compliance with 2.1 G.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit, in writing a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

Emission Standard

- a. Emissions of sulfur dioxide from the brick tunnel kiln (**ID No. K-2**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

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

- b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the combustion of natural gas/ No. 2 fuel oil in this source.
- d. No more than 216 of the 310 burners of brick tunnel kiln (ID No. K-2) shall be fired with No. 6 fuel oil at one time because the preheat section (94 burners) of the kiln is only capable of firing natural gas and No. 2 fuel oil.
- e. The maximum sulfur content of any No. 6 fuel oil received and burned in the brick tunnel kiln (**ID No. K-2**) shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit. [15A NCAC 2Q .0508(bb)]
- f. To assure compliance, the Permittee shall monitor the sulfur content and Btu content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
 - i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the fuel oil received during the quarter;
 - iii. the method used to determine the maximum sulfur content of the fuel oil; and
 - iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the No. 6 fuel oil is not monitored and recorded.

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

Emission Standard

- a. Visible emissions from this tunnel brick kiln (**ID No. K-2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 2D .0501(c)(8)]

- b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month, the Permittee shall observe the emission points of this source 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 the 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 sources in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 G.3.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a 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.

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

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

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

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions NSPS - OOO	7 percent opacity for stack emission sources, 15 percent opacity for crushers, or 10 percent opacity at each belt conveyor and other affected facilities, OR “no visible emissions” from the building enclosing the affected facilities	15A NCAC 2D .0524 (40 CFR 60 Subpart OOO)
odors	See Section 2.2 (A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 2D .1806

* These emission source(s) (ID No(s). CG-30 through CG-55) are permitted as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply.

1. 15A NCAC 2D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

Emission Standard(s) [15A NCAC 2D .0524]

- a. For the NSPS affected facilities within the building subject to a 10 or 15 percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of “no visible emissions” from the unvented building. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

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

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

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

- c. Monitoring to assure compliance with the applicable emissions standard(s) of 2.1 H.1.a. shall be performed by the Permittee as follows:
 - i. observation of a building enclosure containing affected facilities:
 - A. observe the building containing the clay grinding plant each month for any fugitive visible emissions. Should any visible emissions be observed, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 2D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
 - B. an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **OR**
 - ii. observation of an individual affected facility enclosed in the building:

- A. After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed “normal”. The Permittee shall establish “normal” emissions within thirty (30) days of permit effective date by observing each week for thirty (30) days the emissions from each enclosed affected facility. Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**,
- B. an approved Method 9 (or Method 22 if observing an affected facilities building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 2D .0524.

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

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:
 - i. the results of the Permittee’s observation to establish normal;
 - ii. the results of the Permittee’s monthly building fugitive emissions observation or the monthly opacity emissions observations for each affected facility;
 - iii. if option 2.1 H.1.c.ii.A. is followed, the observation to establish normal should be recorded for each affected facility within the building.
 - iv. whether the observed emissions source was the building or each affected facility within the building, the date and time of each observation, and
 - v. if any emissions were observed from the building or whether any emissions observed exceeded “normal”, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
 - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with 2.1 H.1.a. if records of the monitoring results are not maintained.

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

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
 - i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - iii. a report of any noncomplying emissions for all emissions which exceed the “no visible emission” limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.
- f. **NSPS Reporting Requirements** - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
 - i. The date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date; and
 - ii. The actual date of initial start-up of an affected facility, postmarked within 15 days after such date.
 - (a) for a combination of affected facilities in a production line that begin actual initial start-up on the same day, a single notification of startup may be submitted by the Permittee to the Regional Supervisor. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if

available.

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

A. Facility-wide affected sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
odors	Odorous emissions must be controlled; State-enforceable only	15A NCAC 2D .1806
toxic air pollutants	Toxic air pollutant emissions shall not exceed the levels listed in 2Q .0711 unless ambient standards are not exceeded; State-enforceable only	15A NCAC 2Q .0711
	Toxic air pollutant emissions shall not exceed their modeled acceptable ambient levels; State-enforceable only	15A NCAC 2D .1100

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .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.
- b. If the Director determines that a source or facility is emitting an objectionable odor, by the procedures described below, the Permittee shall:
 - i. within 180 days of receipt of written notification from the Director of the requirement to implement maximum feasible controls, complete the determination process outlined in 15A NCAC 2D .1807 and submit to the Director a completed maximum feasible control determination process, a permit application for maximum feasible controls and a compliance schedule;
 - ii. within 18 months of receipt of written notification from the Director of the requirement to implement maximum feasible controls, have installed and begun operating maximum feasible controls.

STATE-ENFORCEABLE ONLY

- 2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT** - Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
Two Brick Tunnel Kilns (ID Nos. K-1 and K-2)	Arsenic and inorganic arsenic compounds	14.8 pounds per year (annual)
	Benzene	1470 pounds per year (annual)
	Benzo(a)pyrene (POM)	17.5 pounds per year (annual)
	Beryllium	2.09 pounds per year (annual)
	bioavailable chromate pigments, as Chromium VI equivalent	2.25 pounds per year (annual)
	Cadmium	11.2 pounds per year (annual)

Chlorine	1.81 pounds per day (24-hour)
Hydrogen Chloride	9.16 pounds per hour
Hydrogen Fluoride	144 pounds per day (24-hour) 6.0 pounds per hour
Mercury aryl and inorganic compounds	0.020 pounds per day (24-hour)
Nickel metal	0.475 pounds per day (24-hour)

- a. To ensure compliance with the above limits, the following restrictions shall apply:
 - i. The brick tunnel kiln (ID No. K-1) shall be limited to 58,000 pounds of clay brick and additives per hour. The limits for hydrogen chloride (HCl) and hydrogen fluoride (HF) were based on the on-site emission test results of 0.26 pounds HCl per ton of clay bricks and additives and 0.15 pounds of HF per ton of clay bricks and additives for brick tunnel kiln (ID No. K-1).
 - ii. The brick tunnel kiln (ID No. K-2) shall be limited to 58,000 pounds of clay brick and additives per hour. The limits for HCl and HF were based on the emission standards for HCl (0.056 pounds of HCl per ton of fired product) and HF (0.057 pounds of HF per ton of fired product) from 40 CFR Part 63 Subpart JJJJJ.
- b. For compliance purposes, within thirty (30) days after each calendar year quarter, the following shall be reported to the Regional Supervisor, Division of Air Quality:
 - i. The maximum amount of materials (clay brick and additives) processed per hour through the respective brick tunnel kilns during the previous quarter.
- c. The Permittee shall maintain records of production rates, throughputs, material usages, and/or other process operational information. The records shall be maintained for a minimum of three years from the date of recording.
- d. The DAQ reserves the right to require in the future that the Permittee perform periodic sampling and analysis of clay and shales used at the facility for determination of hydrogen fluoride concentration.
- e. The Permittee shall notify the Regional Supervisor, Division of Air Quality, within 30 days of initial start-up of the use of any clay used at the facility for determination of hydrogen fluoride concentration.
- f. The Permittee shall notify the Regional Supervisor, Division of Air Quality, within 30 days of initial start-up of the use of any clay or shales received from the new source (supplier), and provide the analytical results of hydrogen fluoride concentration within 30 days of such date.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2Q .0711: “PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS”

- a. Pursuant to 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.
 - i. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - ii. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".
 - iii. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)

carbon disulfide (75-15-0)		3.9		
p-dichlorobenzene (106-46-7)				16.8
fluorides		0.34	0.064	
formaldehyde (50-00-0)				0.04
manganese and compounds		0.63		
1,1,1 trichloroethane (methyl chloroform) (71-55-6)		250		64
methyl ethyl ketone (78-93-3)		78		22.4
methyl isobutyl ketone (108-10-1)		52		7.6
perchloroethylene (127-18-4)	13,000			
phenol (108-95-2)			0.24	
styrene (100-42-5)			2.7	
toluene (108-88-3)		98		14.4
xylene (1330-20-7)		57		16.4

B. Facility-wide affected sources, primarily one natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (42.8 million Btu per hour maximum permitted heat input, ID No. K-1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	Less than 250 tons per year	15A NCAC 2Q .0317 (Avoidance of 2D .0530)

15A NCAC 2Q .0317: AVOIDANCE CONDITION for

1. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, the natural gas/ No. 2 fuel oil-fired/ No. 6 fuel oil-fired brick tunnel kiln (**ID No. K-1**) shall discharge into the atmosphere less than 250 tons of sulfur dioxide total, per consecutive 12-month period. [15A NCAC 2D .0530]

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

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 B.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Operations Restrictions

- c. To ensure emissions do not exceed the limitation above, the following restrictions shall apply:
 - i. The amount of No. 6 fuel oil burned shall be limited to 920,000 gallons per year, and the sulfur content of the No. 6 fuel oil shall not exceed 2.1 percent by weight while using No. 6 fuel oil in the non-preheat section of the kiln and No. 2 fuel oil in the preheat section of the kiln; otherwise, if a combination of fuels is used in the kiln, then the sulfur dioxide emissions shall be calculated using the formula below.

ii. The brick tunnel kiln (**ID No. K-1**) shall be limited to a production rate of 58,000 pounds per hour.

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

- d. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the fuel is not monitored.
- e. The sulfur dioxide emissions from kiln (**ID No. K-1**) shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula:

$$S_2 = T \times 0.3 \frac{\text{lbs } SO_2}{\text{tons brick}} + X \times 0.6 \frac{\text{lbs } SO_2}{\text{mm cu ft}} + Y \times \frac{142 \text{ lbs } SO_2}{1000 \text{ gal No. 2 fuel}} \times S_1 + Z \times \frac{157 \text{ lbs } SO_2}{1000 \text{ gal No. 6 fuel}} \times S_2$$

- Where:
- A is the total actual emissions of sulfur dioxide in pounds
 - T is the total number of tons of bricks produced
 - X is the total amount of natural gas used in the kiln in million cubic feet
 - Y is the amount of No. 2 fuel oil used in the kiln in gallons
 - Z is the amount of No. 6 fuel oil used in the kiln in gallons
 - S₁ is the percent sulfur in the No. 2 fuel oil
 - S₂ is the percent sulfur in the No. 6 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.2 (B)(1)(a).

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

- f. The Permittee shall submit a quarterly 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 three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. The report shall contain the following:
 - i. The monthly sulfur dioxide emissions for the previous 14 months. The emissions must be calculated for each of the 12-month periods over the previous 14 months; and
 - ii. The monthly quantities of natural gas, No. 2 fuel oil and No. 6 fuel oil consumed for the previous 14 months.
- g. To assure compliance with 2D .0530, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
 - i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the No. 6 fuel oil received during the quarter;
 - iii. the method used to determine the maximum sulfur content of the No. 6 fuel oil; and
 - iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur content of the No. 6 fuel oil is not monitored and recorded.

C. One natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (42.8 million Btu per hour maximum permitted heat input, ID No. K-2)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	Less than 250 tons per year	15A NCAC 2Q .0317 (Avoidance of 2D .0530)

15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for

1. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

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

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

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 C.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

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

$$S_2 = A = T \times 0.3 \frac{\text{lbs } SO_2}{\text{tons brick}} + X \times 0.6 \frac{\text{lbs } SO_2}{\text{mm cu ft}} + Y \times \frac{142 \text{ lbs } SO_2}{1000 \text{ gal No. 2 fuel}} \times S_1 + Z \times \frac{157 \text{ lbs } SO_2}{1000 \text{ gal No. 6 fuel}} \times S_2$$

Where:

- A is the total actual emissions of sulfur dioxide in pounds
- T is the total number of tons of bricks produced
- X is the total amount of natural gas used in the kiln in million cubic feet
- Y is the amount of No. 2 fuel oil used in the kiln in gallons
- Z is the amount of No. 6 fuel oil used in the kiln in gallons
- S₁ is the percent sulfur in the No. 2 fuel oil
- S₂ is the percent sulfur in the No. 6 fuel oil

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.2 (C)(1)(a).

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

- e. 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. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
 - ii. The monthly quantities of natural gas, No. 2 fuel oil and No. 6 fuel oil consumed for the previous 17 months.

2.3- Other Applicable Requirements

A. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504

for the air emission source(s) (ID No(s), K-2, CD-K2, and CG-29 through CG-55) on or before 12 months after commencing operation. [15A NCAC 2Q .0501(c)(2)]

SECTION 3 - GENERAL CONDITIONS

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

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

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

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

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

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 2Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.

3. Minor Permit Modifications [15A NCAC 2Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.

4. Significant Permit Modifications [15A NCAC 2Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.

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

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Section 502(b)(10) Changes [15A NCAC 2Q .0523(a)]

a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:

- i. the changes are not a modification under Title I of the Federal Clean Air Act;
- ii. the changes do not cause the allowable emissions under the permit to be exceeded;
- iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
- iv. the Permittee shall attach the notice to the relevant permit.

c. The written notification shall include:

- i. a description of the change;
- ii. the date on which the change will occur;
- iii. any change in emissions; and
- iv. any permit term or condition that is no longer applicable as a result of the change.

d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

2. Off Permit Changes [15A NCAC 2Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

3. Emissions Trading [15A NCAC 2Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

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

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

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

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

Excess Emissions

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

Permit Deviations

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

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

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

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal

operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

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

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

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

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

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

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

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

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

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

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

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

shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the

DAQ, or an authorized representative, to perform the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment

during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.

3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
 - a. a certification of the test results by sampling team leader and facility representative;
 - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);

- c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
 - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
 6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

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

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 2Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

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

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

PART II

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 **associated with Air Quality Permit Application 0400043.05A:**

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
K-1	One natural gas/ No. 2 fuel oil/ No. 6 fuel oil-fired Brick Tunnel Kiln (29.0 tons per hour material output rate, 42.8 million Btu per hour heat input rate) MACT - 40 CFR Part 63 Subpart JJJJ	CD-K1**	Dry Limestone Adsorber (DLA)

** The control device (ID No. CD-K1) is listed as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

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

1. Any air emission sources or control devices listed in Section 1 must be constructed and maintained in accordance with the provisions contained herein and constructed and operated in accordance with provisions contained in Part I of this permit. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A NCAC, Subchapter 2D .0515, .0516, .0521, .1806, .1100 and .1111 and Subchapter 2Q .0317, and .0711.
2. The Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) listed in Section 1 on or before 12 months after commencing operation.

SECTION 3: GENERAL CONDITIONS:

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

A. Operating Conditions

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

B. General Provisions

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

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

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

D. Part II Renewal Request

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

E. Annual Fee Payment

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

F. Reporting Requirements

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

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

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

G. Termination, Modification, and Revocation of the Permit

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

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

H. Inspection and Entry

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

1. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;

2. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
3. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

I. **Circumvention** - STATE ENFORCEABLE ONLY

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

ATTACHMENT

List of Acronyms

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