

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	General Shale Brick, Inc.
Facility Name:	General Shale Brick, Inc.
Facility Location:	770 Webster Road, Blue Ridge, Virginia 24064
Registration Number:	20447
County-Plant ID Number:	51-023-0006
Permit Number:	VA-20447

Issue Date:	<u>July 9, 2007</u>
Effective Date:	<u>August 1, 2007</u>
Expiration Date:	<u>July 31, 2012</u>

Steven A. Dietrich, P.E.
Regional Director, Department of Environmental Quality

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I. Facility Information

Permittee

General Shale Brick, Inc.
P. O. Box 3547
Johnson City, TN 37602

Responsible Official

Dave McNees
Director of Environment

Facility

General Shale Brick, Inc., Plants 35 & 36
770 Webster Road
Blue Ridge, Virginia 24064

Contact Person

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Director of Environment	Environmental Engineer
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Registration Number: 20447

AFS Identification Number: 51-023-0006

Facility Description: SIC Code 3713 – Face Brick / Structural Manufacture of brick from shale. The manufacturing process involves mining, grinding, screening, and blending of the raw materials followed by forming, cutting or shaping, drying, firing (or curing), cooling, storage, and shipping of the final product.

General Shale Brick, Inc. is the current owner of what was previously known as Webster Brick. The plant was registered and permitted in 1973 for the addition of Plant 36, an Interkiln natural gas-fired Dryer/Kiln - 18 “brick” x 389' long – rated at approximately 14.8 tons per hour input. Plant 35 was the existing “grandfathered” portion of the facility, which consisted of shale mining, crushing & screening, handling, and 2 kilns. Records show the Plant 35 kilns “A” and “B” as being installed in 1954. Webster Brick had been in existence at this site since 1928. The source has recently received permits to modify and operate Plant 35 and Plant 36 by installing a coal handling system and to fire the kilns with a coal / natural gas blend.

The brick-making process is as follows: the raw shale is generally loaded by truck or front-end loader into an existing primary crusher for initial size reduction. The inherent moisture content of the raw shale ranges from 3 - 15%. The material is then conveyed to an enclosed grinding room, which houses several grinding mills and banks of screens that produce a fine material that is suitable for forming brick or other products. The shale is conveyed to an enclosed storage area, where it is then used to form bricks in the forming area.

The bricks are formed using a stiff mud extrusion process. The ground raw material is mixed with water and possibly other additives in a pug mill, and the raw material is then discharged into a vacuum chamber. The moisture content of the material entering the vacuum chamber at General Shale is typically between

15% and 20%. The vacuum chamber removes air from the material, which is then augered or extruded into continuous columns of soft, formed mud. The columns are then treated with various friction or setting materials, and wire-cut into soft bricks. Various sands, slurries and engobes used as coloring and texturing agents are also prepared and applied to the surface of the brick. The green bricks at both plants are mechanically set onto kiln cars.

The formed raw or “green” bricks which are loaded onto kiln cars are then sent to a pre-dryer which utilizes waste heat from the kilns, then to one of three kilns at General Shale. Kilns “A” & “B” at Plant 35 are tunnel-type kilns that measure 8 “brick” wide by 417 feet long, and have been modified to fire coal and natural gas with a vaporized propane backup fuel capacity. These two kilns are identical, parallel units. Plant #36 tunnel kiln measures 18 “brick” wide by 389 feet long, also permitted to be fueled by a coal / natural gas blend with a vaporized propane backup. Each include a preheat zone, a firing zone, and a cooling zone. Firing of the green bricks involves six steps: the evaporation of free water, dehydration, oxidation, vitrification, flashing, and cooling.

Stoker-sized coal is charged into the coal processing system at Plant 35 by a wheel loader. The continuous, enclosed system dries and pulverizes the coal to the proper size graduation and distributes it to kilns at Plant 35 and Plant 36.

Uncontrolled PM and PM₁₀ emissions occur from the raw material grinding, screening, handling & storage, as well as fugitive emissions from paved/unpaved roads, or storage piles. Emissions from the brick texturing equipment are controlled by Enviro-Systems pulse-jet baghouses 02 and 03 for plants 35 & 36 respectively. Particulate emissions from the coal processing system are controlled by a fabric filter baghouse. Products of combustion at the facility are managed by proper operation and combustion practices, use of low sulfur and low ash coal, and are exhausted through dry lime adsorption systems (DLA) in each plant. Emissions of hydrogen fluoride and hydrogen chloride will be less than ten tons each with the issuance of a state operating permit requiring these limits.

Emissions that occur during kiln firing and cooling are PM, PM₁₀, SO₂, SO₃, CO & CO₂, NO_x, TOC, VOC, and various HAPs, including HCl and HF. Coal combustion produces emissions of PM, PM₁₀, SO₂, NO_x, CO, and VOCs. Pollutant emissions are calculated using appropriate emission factors which take into consideration fuel usage and specifications, fuel and raw material throughput limitations, add-on or inherent controls, and raw material constituents.

General Shale Brick, Inc. is subject to Title V permitting requirements due to its potential to emit more than 100 tons per year of particulate (PM₁₀), sulfur dioxide (SO₂), and carbon monoxide (CO). For the previous federal operating permit, the facility had the potential to emit more than 10 tons per year of two individual hazardous air pollutant, namely hydrogen fluoride (HF) and hydrogen chloride (HCl). Pursuant to 9 VAC 5 Chapter 80, Article 6, underlying minor NSR permits that are in effect for the facility include a permit to modify and operate dated Dec. 30, 2003 as amended July 5, 2005; a permit to modify and operate dated February 15, 2006; and a permit to modify and operate dated March 6, 2006. A state operating permit pursuant to 9 VAC 5 Chapter 80, Article 5 dated March 16, 2006 is also in effect for the facility. This permit now limits HAP emissions to below Title V threshold levels.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Shale Preparation (01)							
01-01	01	Stedman Grandslam Impactor	150 tons/hr	moisture & enclosure	-	PM/PM ₁₀	3/6/06
01-02	01	Steele Hammermill Model 36-24	100 tons/hr	moisture & enclosure	-	PM/PM ₁₀	3/6/06
01-04	01	(8) 4'x10' Screens (Leahy & Deister)	75 tons/hr	moisture & enclosure	-	PM/PM ₁₀	-
01-05	01	Belt conveyors (11) custom made	75 tons/hr	moisture & enclosure	-	PM/PM ₁₀	-
01-06	01A	Bulk Material Storage Silo	60 cu yards	vent filter	01A	PM/PM ₁₀	3/6/06
01-07	01B	C.E.Raymond Coal Processing System	2.6 tons/hr	Pulse-jet baghouse	07	PM/PM ₁₀	12/30/03
Plant 35 Brick Making & Texturing (02)							
02-01	-	Steele Brick Machine	70 tons/hr	Building enclosure	-	PM/PM ₁₀	-
02-02	02	Custom Brick Texturing Equipment	2 tons/hr	Pulse-jet baghouse	02	PM/PM ₁₀	-
Plant 36 Brick Making & Texturing (03)							
03-01	-	Steele Brick Machine	65 tons/hr	Baghouse, Gold Series GS-12	03	PM/PM ₁₀	3/6/06
03-02	02	Custom Brick Texturing Equipment	2 tons/hr	Pulse-jet baghouse	03A	PM/PM ₁₀	3/6/06
Plant 35 Dryer/Kilns (04 & 05)							
04	04	35A Dryer/Kiln – Harrop 1954	10.1 tons/hr in 8.2 tons/hr out	Dry Limestone Adsorber	DLA-1	HF, HCl, SO ₂ , (PM)	12/30/03 & 3/16/06
05	04	35B Dryer/Kiln – Harrop 1955	10.1 tons/hr in 8.2 tons/hr out	Dry Limestone Adsorber	DLA-1	HF, HCl, SO ₂ , (PM)	12/30/03 & 3/16/06
Plant 36 Dryer/Kiln (06)							
06	06	36 Dryer/Kiln – Interkiln 1973	22.0 tons/hr in 17.5 tons/hr out	Dry Limestone Adsorber	DLA-2	HF, HCl, SO ₂ , (PM)	2/15/06 & 3/16/06

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Process Equipment Requirements - Existing Equipment

Unit # 01-04 – Screening operation (75 tons/hr)

Unit # 01-05 - (11) Custom Conveyors (7 tons/hr)

Unit # 02-01 - Steele Brick Machine (Plant 35) (65 tons/hr)

Unit # 02-02 - Custom-built brick texturing equipment (Plant 35) (2 tons/hr)

A. Limitations

1. **Control Equipment** - Particulate emissions from the Custom-built brick texturing equipment facility (Unit #02-02) shall be controlled by the use of a fabric filter baghouse.
(9 VAC 5-80-110)

2. **Existing Source Standard for Particulate Matter for Sand and Gravel Processing Operations and Stone Quarrying and Processing Operations** – No owner or other person shall cause or permit any material to be produced, handled, stockpiled or transported without taking measures to reduce to a minimum any particulate matter from becoming airborne. Where it is practical to measure the emission, the emission shall not exceed the limits established by Table 4-14 of 9 VAC 5-40-1840. All such airborne particulate matter emanating from the yards, sidings or roads of such operations shall be considered fugitive dust and shall be controlled as stipulated in 9 VAC 5-40-1860. All crushers shall be fitted with liquid sprays or other appropriate systems that effectively limit the escape of airborne dust. Vibrating and shaker screens handling dry materials shall be enclosed or fitted with a collector system that will prevent the release of more than 0.05 grains per standard cubic foot. All feeders, elevators, conveyors, transfer points, discharge points and loading points shall be equipped with collectors, sprays or other means when necessary to minimize the escape of dust. This standard is applicable to the following emission units: (Unit # 01-04, # 01-05).

Stone/Sand & Gravel Processing particulate emissions based on Table 4-14 of 9 VAC 5-40-1840 are limited to the following:

Existing Source ID #	Description	Rated Capacity	PM / PM10 Limit lb/hr	PM / PM10 Limit tons/yr
01-04	Screening operation	75 tons/hr total	48.45	100.77
01-05	Custom Conveyors (11)	75 tons/hr total	48.45	100.77

Compliance with the particulate emission standard may be demonstrated using the following equation: particulate emission rate (lbs/hr) = bricks produced (tons/hr) x particulate emission factor (lbs/ton). The emission factor shall be based on the results of a stack test of this facility or similar facilities, or, if these are not available the appropriate emission factor given in Section 11.3 AP-42 (8/97) may be used. Annual

actual emissions are to be calculated monthly as the sum of each consecutive 12-month period
 (9 VAC 5-80-110 and 9 VAC 5-40-1840)

3. **Existing Source Standard for Particulate Matter (AQCR 1-6) - General Process Operations** - Interpolation of the data in Table 4-4A of 9 VAC 5-40-260 for process weight rates up to 60,000 lb/hr shall be accomplished by use of the following equation: $E = 4.10 P^{0.67}$, where E = emission rate in lb/hr, and P = process weight rate in tons/hr. This standard is applicable to the following existing emission units: (Unit # 02-01, # 02-02).

General Process particulate emissions based on Table 4-4A of 9 VAC 5-40-260 are limited to the following:

Source ID	Description	Rated Capacity	PM / PM10 Limit lb/hr	PM / PM10 Limit tons/yr
02-01	Steele Brick Machine (Plant 35)	70 tons/hr	47.05	48.93
02-02	Custom built brick texturing equipment (Plant 35)	2 tons/hr	6.52	6.78

Compliance with the particulate emission standard may be demonstrated using the following equation: particulate emission rate (lbs/hr) = bricks produced (tons/hr) x particulate emission factor (lbs/ton). The emission factor shall be based on the results of a stack test of this facility or similar facilities, or, if these are not available, the appropriate emission factor given in Table 11.3-2 of AP-42 (8/97) may be used. Annual actual emissions are to be calculated monthly as the sum of each consecutive 12-month period.
 (9 VAC 5-80-110 and 9 VAC 5-40-260 C)

4. **Existing Source Standard for Visible Emissions** - Unless otherwise specified in this part, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. This standard is applicable to the following emission units: existing screens (Unit # 01-04), existing conveyors (Unit # 01-05) and the Steele Brick Machine & Custom Texture equipment for Plant 35 (Unit # 02-01 and # 02-02).
 (9 VAC 5-80-110 and 9 VAC 5-40-90)

5. **Operation and Maintenance** - Emissions from existing sources shall be controlled by proper operation and maintenance. Operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. This standard is applicable to the following emission units: existing screens (Unit # 01-04), existing conveyors (Unit # 01-05), and the Steele Brick Machine & Custom Texture equipment for Plant 35 (Unit # 02-01 and # 02-02).
(9 VAC 5-40-20 and 9 VAC 5-80-110)

B. Monitoring

1. **Control Equipment** - The fabric filter controlling the custom-built brick texturing equipment (Unit # 02-02) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be constructed in an accessible location and shall be maintained by the permittee such that it is in proper working order.
(9 VAC 5-80-110)

C. Recordkeeping

1. **On Site Records** - The permittee shall develop a data base record keeping system, or equivalent methodology acceptable to the Department, to maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:
 - a. The annual throughput of shale through the screening operation (Unit #01-04) and conveyors (Unit #01-05), calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. The annual production of brick for the Steele Brick Machine (Unit #02-01) and Custom built brick texturing equipment (Unit #02-02) at Plant 35, calculated monthly as the sum of each consecutive twelve (12) month period.
 - c. Weekly records of the pressure drop across the fabric filter controlling the Custom built brick texturing equipment (Unit #02-02) at Plant 35.
 - d. Estimated annual particulate matter emissions from the screening operation (Unit 01-04), the conveyors (Unit 01-05), the Plant 35 Brick Making Machine (Unit 02-01), and the Plant 35 brick texturing equipment (Unit 02-02). Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110 and 9 VAC 5-40-50)

2. **Training – Operation & Maintenance** - The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule, as listed in Condition III. A. 5. of this permit, for all existing equipment located at the facility. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ
(9 VAC 5-80-110 and 9 VAC 5-40-50)

D. Testing

1. **Ports / Methods** - Upon request from the Department, test ports will be provided at the appropriate locations. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use test methods in accordance with procedures approved by the DEQ.
(9 VAC 5-40-30 and 9 VAC 5-80-110)

E. Reporting

The reporting requirements for this section are satisfied by the recordkeeping requirements in this section and requirements in the Facility-Wide and General Conditions sections.

IV. Process Equipment Requirements - New / Modified Equipment

Unit # 01-01 – Stedman Grandslam Impactor(150 tons/hr)

Unit # 01-02 - Steele Hammermill-Model 36-24 (100 tons/hr - NSPS OOO)

Unit # 01-06 - Bulk Material Storage Silo (10 tons/hr, 75 ton capacity)

Unit # 03-01 - Steele Brick Machine -Plant 36 (65 tons/hr)

Unit # 03-02 - Custom built brick texturing equipment - Plant 36 (2 tons/hr)

Unit # 04 – Plant 35 “A” Tunnel Dryer/Kiln - Harrop 8 (brick) wide x 417 feet long fired with coal and natural gas rated at 18.2 MMBtu/hr and 8.2 tons per hour production

Unit # 05 – Plant 35 “B” Tunnel Dryer/Kiln - Harrop 8 (brick) wide x 417 feet long fired with coal and natural gas rated at 18.2 MMBtu/hr and 8.2 tons per hour production

Unit # 06 - Plant 36 InterKiln Tunnel Dryer/Kiln - 18 (brick) wide x 389 feet long fired with coal and natural gas rated at 25 MMBtu/hr and 17.5 tons per hour production.

Unit # 07 - C.E. Raymond / Custom Coal Processing System rated at 2.6 tons/hr

A. Limitations

- 1. Plant 35 - Production** – Plant 35 (Unit # 04 and Unit # 05), shall produce no more than 143,664 tons of brick per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 10 of the 12/30/03 permit, and Condition 8 of the 3/16/06 permit)
- 2. Plant 36 - Production** – Plant 36 (Unit # 06) shall produce no more than 154,000 tons of brick per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 9 of the 2/15/06 permit and Condition 7 of the 3/16/06 permit)
- 3. Fuel** - The approved fuels for the kilns (Unit # 04, Unit # 05, and Unit #06) are coal and natural gas (with propane backup). The kilns may be fired with 100% natural gas, or a mix of coal with natural gas supplement. A change in the approved fuels may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 11 of the 12/30/03 permit, Condition 10 of the 2/15/06 permit, and Condition 9 of the 3/16/06 permit)

4. **Fuel Throughput: Plant 35** – For optimum kiln combustion, Kiln 35A (Unit # 04) and Kiln 35B (Unit # 05) shall each consume no more than 1,020 lbs/hr (0.51 tons/hr) of coal, calculated monthly as total pounds (tons) of coal divided by total kiln operating hours; and 4,468 tons of coal per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110, VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 12 of the 12/30/03 permit, and Condition 11 of the 3/16/06 permit)

5. **Fuel Throughput: Plant 36** - For optimum kiln combustion, Kiln 36 (Unit # 06) shall consume no more than 1,540 lbs/hr (0.77 tons/hr) of coal, calculated monthly as total pounds (tons) of coal divided by total kiln operating hours; and 6,764 tons of coal per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 11 of the 2/15/06 permit, and Condition 10 of the 3/16/06 permit)

6. **Fuel Specifications** - The coal, natural gas, and propane used for fuel in the kilns (Unit # 04, Unit # 05, and Unit #06) shall meet the specifications below:

 COAL :
 Maximum sulfur content per shipment: 1.0 %
 as determined by ASTM D3177, D4239, or a DEQ-approved equivalent method
 Maximum ash content per shipment: 6.0%
 as determined by ASTM D3174 or a DEQ-approved equivalent method]

 NATURAL GAS:
 Minimum heat content: 1,000 Btu/cf HHV
 as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method

 LPG, including butane and propane, which meets ASTM specifications D1835

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-850, Condition 13 of the 12/30/03 permit, Condition 12 of the 2/15/06 permit, and Condition 12 of the 3/16/06 permit)

7. **Emission Controls: Plant 35** - Sulfur dioxide, hydrogen fluoride, and hydrogen chloride emissions from Plant 35 A & B Kilns (Unit # 04 and Unit # 05) shall be controlled by a single Ohlmann type dry limestone adsorber (DLA-1). The shared dry limestone adsorber shall be provided with adequate access for inspection and shall be in operation when either of the associated kilns is operating.
(9 VAC 5-80-110, 9 VAC 5-50-260, Condition 3 of the 12/30/03 permit, and Condition 3 of the 3/16/06 permit)

8. **Emission Controls: Plant 36** – Sulfur dioxide, hydrogen fluoride, and hydrogen chloride emissions from the Plant 36 Kiln (Unit # 06) shall be controlled by a single Ohlmann type dry limestone adsorber (DLA-2). The dry limestone adsorber shall be provided with adequate access for inspection and shall be in operation when the Plant 36 kiln is operating.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, Condition 3 of the 2/15/06 permit, and Condition 2 of the 3/16/06 permit)

9. **Emission Controls** – Particulate and sulfur dioxide emissions from all kilns (Unit # 04, Unit # 05, and Unit # 06) shall be controlled by:
 - a. Installation of target firing reducing solid fuel requirements;
 - b. Operating the dryer/kilns under reduced draft conditions;
 - c. Use of supplemental fuel (natural gas) to reduce solid fuel requirement;
 - d. Fuel specifications to include low sulfur and ash content of coal.
(9 VAC 5-80-110, 9 VAC 5-50-260, Condition 4 of the 12/30/03 permit, and Condition 2 of the 2/15/06 permit)

10. **Emission Controls** – Particulate emissions from each Ohlman dry limestone adsorber limestone storage tower shall be controlled by a fabric filter, bin vent filter, or equivalent. Each control device shall be provided with adequate access for inspection and shall be in operation when the associated Ohlman dry limestone adsorber is operating or when the storage tower is being filled.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 4 of the 2/15/06 permit)

11. **Emission Controls** - Particulate emissions from the Ohlman dry limestone adsorber spent limestone hopper shall be controlled by enclosure. The enclosure shall be provided with adequate access for inspection and shall be installed and operated according to manufacturer's specifications, at a minimum.
(VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 5 of the 2/15/06 permit)

12. **Emission Controls** – Particulate emissions from the Coal Processing System (Unit # 07) shall be controlled by a fabric filter baghouse. The baghouse shall be provided with adequate access for inspection and shall be in operation when the Coal Processing System is operating.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of the 12/30/03 permit)

13. **Control Efficiency** - The dry limestone adsorber (DLA-1) controlling emissions from Plant 35 (Unit # 04 and Unit # 05) shall demonstrate a control efficiency by stack test for sulfur dioxide of no less than 10 percent (10%), when burning coal. Subsequent to the initial stack test, this permit may be modified to require the DLA to meet or exceed the control efficiencies established by initial stack test, using similar fuels, operating practices, and limestone.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 6 of the 12/30/03 permit)

14. **Control Efficiency** - The dry limestone adsorber (DLA-2) controlling emissions from Unit # 06 (Kiln 36) shall demonstrate a control efficiency by stack test for sulfur dioxide of no less than twelve percent (12%), when burning coal. Subsequent to the most recent stack test that verifies compliance, this permit may be modified to require the DLA to meet or exceed the control efficiency established by such stack test, using similar fuels, operating practices, and limestone.
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 6 of the 2/15/06 permit)

15. **Control Efficiency** - Each dry limestone adsorber (DLA-1 or DLA-2) shall demonstrate a control efficiency by stack test for hydrogen fluoride of at least ninety percent (90%). Subsequent to the most recent stack test which verifies compliance, this permit may be modified to require each DLA to meet or exceed the control efficiencies established by such stack test, using similar fuels, operating practices, and limestone.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-80-850, and Condition 4 of the 3/16/06 permit)

16. **Control Efficiency** – Each dry lime adsorber (DLA-1 or DLA-2) shall demonstrate a control efficiency by stack test for hydrogen chloride (HCl) of at least thirty percent (30%). Subsequent to the most recent stack test which verifies compliance, this permit may be modified to require each DLA to meet or exceed the control efficiencies established by such stack test, using similar fuels, operating practices, and lime.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-80-850, and Condition 5 of the 3/16/06 permit)

17. **Emission Controls** – Particulate emissions from the Stedman Grandslam Impactor (Unit # 01-01) shall be controlled by inherent moisture of product and enclosure. The material and enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 2 of the 3/6/06 permit)

18. **Emission Controls** – Particulate emissions from the Plant 36 Steele brick machine (Unit # 03-01) and custom-built texturing equipment (Unit #03-02) shall be controlled by the use of one or more fabric filter baghouse(s). The baghouse(s) shall be provided with adequate access for inspection and shall be in operation when the Steele brick machine (Unit # 03-01) or custom-built texturing equipment (Unit #03-02) is operating.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 3 of the 3/6/06 permit)
19. **Emission Control - Emission Controls** – Particulate emissions from the Steele hammermill (Unit # 01-02) shall be controlled by wet suppression. The wet suppression spray systems shall be provided with adequate access for inspection and shall be in operation when the Steele hammermill (Unit # 01-02) is operating.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 4 of the 3/6/06 permit)
20. **Emission Controls** – Particulate emissions from the bulk material storage silo (Unit # 01-06) shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 5 of the 3/6/06 permit)
21. **Throughput** - The annual throughput of crushed stone from the Steele hammermill (Unit # 01-02) shall not exceed 336,384 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180 and Condition 9 of the 3/6/06 permit)
22. **Emission Limits** - Particulate emissions from the operation of the Steele hammermill (Unit #01-02) shall not exceed the limits specified below:

Particulate Matter	3.0 lbs/hr	5.05	tons/yr
PM ₁₀	2.76 lbs/hr	4.64	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be demonstrated by compliance with Conditions IV.A.19 and IV.A.21 and by using the following equation: particulate emission rate (lbs/hr) = bricks produced (tons/hr) x particulate emission factor (lbs/ton). The appropriate emission factor given in Section 11.3 of AP-42 (8/97) may be used. Annual emissions are to be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 10 of the 3/6/06 permit)

23. **Emission Limits: Plant 35** – Total emissions from the operation of the Plant 35 kilns (Unit # 04 and Unit # 05), combined, shall not exceed the limits specified below:

Particulate Matter	26.76 lbs/hr	117.23 tons/yr
PM-10	21.22 lbs/hr	92.95 tons/yr
Sulfur Dioxide	38.92 lbs/hr	170.46 tons/yr
Nitrogen Oxides (as NO ₂)	7.84 lbs/hr	34.34 tons/yr
Carbon Monoxide	19.68 lbs/hr	86.20 tons/yr
Volatile Organic Compounds	1.13 lbs/hr	4.94 tons/yr

Annual emissions calculated monthly as the sum of each consecutive 12-month period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers IV-A-1; IV-A-3; IV-A-4; IV-A-6; IV-A-7; IV-A-9; IV-A-14; IV-A-15; IV-A-16; IV-A-31; IV-B-1; IV-B-2; IV-B-5; IV-C-1; IV-D-1; and IV-D-2.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 16 of the 12/30/03 permit)

24. **Emission Limits: Plant 36** – Total emissions from the operation of Unit # 06 (Kiln 36) shall not exceed the limits specified below:

Particulate Matter	16.89 lbs/hr	74.0 tons/yr
PM-10	15.31 lbs/hr	67.07 tons/yr
Sulfur Dioxide	18.58 lbs/hr	81.40 tons/yr
Nitrogen Oxides (as NO ₂)	8.97 lbs/hr	39.31 tons/yr
Carbon Monoxide	21.12 lbs/hr	92.50 tons/yr
Volatile Organic Compounds	1.41 lbs/hr	6.17 tons/yr

Annual emissions calculated monthly as the sum of each consecutive 12-month period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers IV-A-2; IV-A-3; IV-A-5; IV-A-6; IV-A-8; IV-A-9; IV-A-11; IV-A-12; IV-A-13; IV-A-16; IV-A-31; IV-B-1; IV-B-2; IV-B-5; IV-C-1; IV-D-1; and IV-D-2.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 15 of the 2/15/06 permit)

25. **Emission Limits** – Baghouse exhaust emissions from the operation of the Unit # 07 (Coal Processing System) shall not exceed the limits specified below:

Particulate Matter	0.02 gr/dscf	0.37 lb/hr	1.62 tons/yr
PM ₁₀	0.02 gr/dscf	0.37 lb/hr	1.62 tons/yr

Annual emissions calculated monthly as the sum of each consecutive 12-month period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers IV-A-12; IV-A-32; IV-B-6; IV-C-19; IV-D-1; and IV-D-2.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 17 of the 12/30/03 permit)

26. **Visible Emission Limit** - Visible emissions from the Stedman Grandslam Impactor (Unit # 01-01) shall not exceed fifteen percent (15%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, Condition 12 of the 3/6/06 permit)
27. **Visible Emission Limit** - Visible emissions from the Plant 36 Steele brick machine (Unit # 03-01) and custom-built texturing equipment (Unit #03-02) fabric filter exhaust stack(s) shall not exceed seven percent (7%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, Condition 13 of the 3/6/06 permit)
28. **Visible Emission Limit** - Visible emissions from the Steele hammermill (Unit # 01-02) shall not exceed seven percent (7%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-410, Condition 14 of the 3/6/06 permit, and section 60.672 b. of 40 CFR 60, Subpart OOO)
29. **Visible Emission Limit** - Visible emissions from stockpiles, surge bins, conveyor transfers and fugitive emission sources shall not exceed ten percent (10%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-410, and Condition 15 of the 3/6/06 permit)
30. **Visible Emission Limit** - Visible emissions from the bulk material storage silo fabric filter shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-410, and Condition 16 of the 3/6/06 permit)

31. **Visible Emission Limit** - Visible emissions from the Plant 35 Dry Limestone Adsorber (DLA-1) and Plant 36 Dry Limestone Adsorber (DLA-2) exhaust stacks shall not exceed ten percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, Condition 18 of the 12/30/03 permit, and Condition 16 of the 2/15/06 permit)

32. **Visible Emission Limit** - Visible emissions from the coal processing system (Unit #07) baghouse exhaust stack shall not exceed five percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed ten percent (10%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 19 of the 12/30/03 permit)

33. **Requirements by Reference – NSPS: Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS – designated equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO – *Standard of Performance for Nonmetallic Mineral Processing Plants*. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-400, 9 VAC 5-50-410, and Condition 17 of the 3/6/06 permit)

B. Monitoring

1. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of coal. Each fuel supplier certification shall include the following:
 - a. The date on which the coal shipment was received;
 - b. The quantity of coal delivered (in pounds or tons) in the shipment;
 - c. The sulfur content (% sulfur) and ash content (% ash) of the coal;
 - d. Documentation of sampling of the coal indicating the location of the fuel when the sample was taken, and;
 - e. The method(s) used to determine the sulfur content and ash content of the coal.Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ or as required by Condition IV. B. 2 may be used to determine compliance with the fuel specifications stipulated in Condition IV. A. 6. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, 9 VAC 5-170-160, 9 VAC 5-80-850, Condition 14 of the 12/30/03 permit, Condition 13 of the 2/15/06 permit, and Condition 13 of the 3/16/06 permit)

2. **Fuel Sampling and Analysis:** If the fuel supplier certification as required in Condition IV. B. 1. does not contain sufficient data for coal sulfur content and ash content, a sample of the coal delivered to the kiln burner(s) shall be collected at least once per week and composited for a monthly analysis. The composite shall be analyzed for percent (%) sulfur by weight and percent (%) ash by weight. The analyses shall meet the requirements of ASTM Methods D3177 or D4239 (sulfur content) and ASTM Methods D2795 or D3174 (ash content) or a DEQ approved equivalent method. The approved procedure for collecting the samples shall list all pertinent information regarding sample size and number, where sample is taken, etc. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-170-160, 9 VAC 5-80-850, Condition 15 of the 12/30/03 permit, Condition 14 of the 2/15/06 permit, and Condition 14 of the 3/16/06 permit)
3. **Monitoring Devices** - The fabric filter baghouse(s) controlling particulate emissions from the Plant 36 Steele brick machine (Unit # 03-01) and custom-built texturing equipment (Unit #03-02) shall be equipped with a device to continuously measure the pressure differential across the filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and maintained by the permittee such that it is proper working order at all times when the control device is operating.
(9 VAC 5-80-110, 9 VAC 5-80-1180 D, 9 VAC 5-50-260 and Condition 7 of the 3/6/06 permit)
4. **Monitoring Device Observation** – To ensure good performance, the fabric filter monitoring device(s) used to continuously measure differential pressure across the fabric filter baghouse controlling particulate emissions from the Plant 36 Steele brick machine (Unit # 03-01) and custom-built texturing equipment (Unit #03-02) shall be observed by the permittee with a frequency of not less than once per week. The permittee shall keep a log of the observations from the control monitoring device.
(9 VAC 5-80-110, 9 VAC 5-80-1180 D, and Condition 8 of the 3/6/06 permit)
5. **Monitoring Devices/Observations** – The permittee shall monitor the operational parameters listed below for the dry lime adsorbers (DLA-1 and DLA-2):
 - a. Maintain pressure drop at or above average pressure established during the most recent performance test that verifies compliance. The device used to monitor differential pressure shall be observed by the permittee with a frequency sufficient to ensure good performance of the Ohlman dry lime adsorber. The permittee shall keep a log of the observations from the device used to monitor differential pressure.
 - b. Visually verify limestone hopper and storage bin contains adequate limestone daily.

- c. Record limestone feeder setting daily and maintain at or above level established during the most recent performance test that verifies compliance.
- d. Use same grade limestone established during the most recent performance test that verifies compliance. Retain purchase records of limestone.
- e. Record visible emissions from the DLA exhaust stack once per week during normal operation of the kiln. The visible emissions evaluation (VEE) shall be conducted using 40 CFR 60 Appendix A Method 9 for at least six (6) minutes. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. All visible emission observations, VEE results, and corrective actions taken shall be recorded.

Monitoring device(s) shall be installed, maintained, calibrated and operated in accordance with approved procedures that shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the dry lime adsorber is operating.

(9 VAC 5-80-110, 9 VAC 5-80-1180 D, 9 VAC 5-50-350, 9 VAC 5-80-850, Condition 8 of the 12/30/03 permit, Condition 8 of the 2/15/06 permit and Condition 6 of the 3/16/06 permit)

- 6. **Monitoring Device / Observation** – The fabric filter baghouse controlling PM / PM₁₀ emissions from Unit # 07 (Coal Processing System) shall be equipped with a magnehelic gauge to continuously measure the differential pressure drop across the fabric filter. The gauge shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The magnehelic gauge shall be provided with adequate access for inspection and shall be in operation when the baghouse is operating. The gauge shall be observed by the permittee weekly to ensure good performance of the baghouse. The permittee shall keep a log of the observations from the magnehelic gauge.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 9 of the 12/30/03 permit)

C. Recordkeeping

On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

1. **Records** - Monthly and annual production of brick for Plants 35 and 36. Annual production shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24a of the 12/30/03 permit, Condition 21a of the 2/15/06 permit, and Condition 18a of the 3/16/06 permit)
2. **Records** - Daily, monthly and annual operating hours for each Plant 35 kiln A and B. Annual operating hours shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24b of the 12/30/03 permit, and Condition 18b of the 3/16/06 permit)
3. **Records** - Monthly and annual operating hours for the Plant 36 kiln. Annual operating hours shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 21b of the 2/15/06 permit, and Condition 18b of the 3/16/06 permit)
4. **Records** - Monthly and annual throughput of material processed through the Steele hammermill (Unit #01-02). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 22a of the 3/6/06 permit)
5. **Records** - Hourly, monthly and annual consumption of coal and natural gas (or propane as backup fuel) in each Plant 35 kiln (Units # 04, and # 05). Annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24c of the 12/30/03 permit, and Condition 18c of the 3/16/06 permit)
6. **Records** - Monthly and annual consumption of coal and natural gas (or propane as backup fuel) in the Plant 36 kiln (Unit #06). Annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 21c of the 2/15/06 permit, and Condition 18c of the 3/16/06 permit)
7. **Records** - All records, including fuel certification and fuel analyses, showing the percentage of sulfur and ash content in coal specifications for use in sulfur dioxide and particulate emission calculations, including records of any fuel supplier certifications and fuel analyses.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24d of the 12/30/03 permit, Condition 21d of the 2/15/06 permit, and Condition 18d of the 3/16/06 permit)

8. **Records** - All records and analyses of representative sulfur content (%) in shale.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24e of the 12/30/03 permit, Condition 21e of the 2/15/06 permit, and Condition 18e of the 3/16/06 permit)
9. **Records** - Emission records of PM, PM₁₀ for the Steele hammermill (Unit #01-02) using calculation methods approved by the Department.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 22b of the 3/6/06 permit)
10. **Records** - Hourly and annual records of PM, PM₁₀, SO₂, NO_x, CO and VOC emissions from the Plant 35 kilns (Unit # 04 and Unit # 05) using calculation methods approved by the Air Compliance Manager, West Central Regional Office.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 24f of the 12/30/03 permit)
11. **Records** - Monthly and annual records of PM, PM₁₀, SO₂, NO_x, CO and VOC emissions from the Plant 36 kiln (Unit # 06) using calculation methods approved by the Air Compliance Manager, West Central Regional Office.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 21f of the 2/15/06 permit)
12. **Records** - Records of emissions of HAPs from Plant 35 kilns (Unit # 04 & Unit # 05) and the Plant 36 kiln (Unit # 06) using calculation methods approved by the Air Compliance Manager, West Central Regional Office to verify compliance with the emissions limitations of this permit.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 18f of the 3/16/06 permit)
13. **Records** - Records identifying the relevant, pollutant-specific emission factors used in calculating emissions and the equations used in the calculations.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24g of the 12/30/03 permit, Condition 21g of the 2/15/06 permit, and Condition 18g of the 3/16/06 permit)
14. **Records** - Daily limestone feeder settings of the DLA, and purchase records and grade rating for limestone used in DLA.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24h of the 12/30/03 permit, Condition 21h of the 2/15/06 permit, and Condition 18h of the 3/16/06 permit)
15. **Records** - Log of the observations from the devices used to monitor differential pressure from the DLA filters.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 21i of the 2/15/06 permit, and Condition 18i of the 3/16/06 permit)

16. **Records** - Weekly visible emission observation results from the DLA exhaust stacks. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 21k of the 2/15/06 permit, and Condition 18k of the 3/16/06 permit)
17. **Records** - Control efficiency of the DLAs for sulfur dioxide emission reduction using a calculation method approved by the Air Compliance Manager, West Central Regional Office. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 21m of the 2/15/06 permit)
18. **Records** - Records of control efficiency of each DLA for hydrogen fluoride and hydrogen chloride emission reduction using calculation methods approved by the Air Compliance Manager, West Central Regional Office. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 18m of the 3/16/06 permit)
19. **Records** - Operation and control device monitoring records for the baghouse which controls the coal processing system (Unit #07). (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 24i of the 12/30/03 permit)
20. **Records** - Operation and control device monitoring records for the Plant 36 baghouse differential pressure monitors. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, and Condition 22c of the 3/6/06 permit)
21. **Records** - Scheduled maintenance, unscheduled maintenance and operator training. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the three (3) kilns. These procedures shall be based on the manufacturer's recommendations, at minimum. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24j of the 12/30/03 permit, Condition 21j of the 2/15/06 permit, Condition 22d of the 3/6/06 permit, and Condition 18j of the 3/16/06 permit)
22. **Records** - Results of all stack tests, visible emission evaluations and performance evaluations. (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-50, Condition 24k of the 12/30/03 permit, Condition 21l of the 2/15/06 permit, Condition 22e of the 3/6/06 permit, and Condition 18l of the 3/16/06 permit)

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

D. Testing

1. **Stack Tests:** - Upon request by the DEQ, the permittee shall conduct additional performance tests to demonstrate compliance with the emission limits and/or control efficiency requirements contained in this permit. The details of the tests shall be arranged with the Air Compliance Manager, West Central Regional Office.
(9 VAC 5-80-110, 9 VAC 5-50-30 G, 9 VAC 5-80-850, Condition 22 of the 12/30/03 permit, Condition 19 of the 2/15/06 permit, and Condition 17 of the 3/16/06 permit)
2. **Visible Emissions Evaluation:** - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Air Compliance Manager, West Central Regional Office.
(9 VAC 5-80-110, 9 VAC 5-50-30 G, Condition 23 of the 12/30/03 permit, Condition 20 of the 2/15/06 permit, and Condition 18 of the 3/6/06 permit)
3. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B). If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use test methods in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110, 9 VAC 5-50-30, and Condition 25 of the 12/30/03 permit)

E. Reporting

1. **NSPS Like-for-Like Replacement Notification** - Within thirty (30) days of completion, the permittee shall furnish written notification to the EPA Region III Office of equipment replacement; to include the following information, as applicable pertaining to NSPS equipment as described at the beginning of this section:
 - a. The rated capacity, in tons per hour, of the existing operation being replaced,
 - b. The rated capacity, in tons per hour, of the replacement equipment,
 - c. The total surface area of the top screen of:
 - (1) the existing screening operation being replaced
 - (2) the replacement screening operation
 - d. The conveyor belt width of:
 - (1) the existing belts being replaced
 - (2) the replacement belts

- e. The rated storage capacity, in tons, of:
 - (1) the existing bins being replaced
 - (2) the replacement bins
- f. A description of the control device used to reduce particulate matter emissions from the existing operation, and a list of all other pieces of equipment controlled by the same device, and
- g. The estimated age of the existing equipment.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410 and Condition 20 of the 3/6/06 permit)

Further reporting requirements for this section are satisfied by the record keeping requirements in this section and by the General Permit Conditions in the Facility-Wide and General Requirements section.

V. Facility Wide Conditions

A. Limitations

1. **Plant Wide Emission Limits** – On or before May 16, 2006, hazardous air pollutant (HAP) emissions, as defined by §112(b) of the Clean Air Act, from the combined operation of Unit # 04 (Kiln 35 “A”), Unit # 05 (Kiln 35 “B”) and Unit # 06 (Kiln 36) shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110, 9 VAC 5-80-850, and Condition 15 of the 3/16/06 permit)
2. **Fugitive Dust Emission Controls** - Fugitive dust emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, grading of roads, or clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition;
 - c. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;
 - d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion;
 - e. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion;
 - f. Dust from material handling and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design. Pressure gauges shall be installed with adequate access for inspection to indicate system operating pressures; and
 - g. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, 9 VAC 5-50-90, 9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260, Condition 6 of the 3/6/06 permit, Condition 7 of the 12/30/03 permit, and Condition 7 of the 2/15/06 permit)

3. **Maintenance/Operating Procedures** - In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
 - b. Maintain an inventory of spare parts that are needed to minimize the duration of air pollution control equipment breakdowns.
 - c. Have available written operating procedures for equipment. Those procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

(9 VAC 5-80-110, 9 VAC 5-80-850, Condition 32 of the 12/30/03 permit, Condition 30 of the 2/15/06 permit, Condition 30 of the 3/6/06 permit, and Condition 27 of the 3/16/06 permit)

4. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I, 9 VAC 5-80-110, 9 VAC 5-80-850, Condition 31 of the 12/30/03 permit, Condition 29 of the 2/15/06 permit, Condition 29 of the 3/6/06 permit, and Condition 26 of the 3/16/06 permit)

B. Monitoring

1. **Visible Emissions** - Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using modified 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. Each emissions unit in the observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three additional six minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded.

(9 VAC 5-80-110)

C. Recordkeeping

1. **On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:
 - a. Records of HAP emissions from Unit # 04 (Kiln 35 "A"), Unit # 05 (Kiln 35 "B") and Unit # 06 (Kiln 36) using calculation methods approved by the Air Compliance Manager, West Central Regional Office to verify compliance with the ton/yr emissions limitations in Condition V. A. 1.
 - b. Weekly records of required opacity evaluations including all Method 22 evaluations, all Method 9 evaluations, all malfunction adjustments associated with opacity observations, and a record of any emission units which did not operate during the weekly evaluation period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110 and/or Condition 18f of 3/16/06 Permit)
2. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-80-110, 9 VAC 5-20-180 J, 9 VAC 5-80-1180 D, 9 VAC 5-80-850, Condition 26 of the 2/15/06 permit, Condition 26 of the 3/6/06 permit, and Condition 23 of the 3/16/06 permit)
3. **Monitoring Information** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

D. Testing

1. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).
(9 VAC 5-80-110, 9 VAC 5-50-30, and Condition 25 of the 12/30/03 permit)

E. Reporting

1. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
 - a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110, 9 VAC 5-20-180 B, 9 VAC 5-80-850, Condition 29 of the 12/30/03 permit, Condition 25 of the 2/15/06 permit, Condition 25 of the 3/6/06 permit, and Condition 22 of the 3/16/06 permit)

2. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been

corrected and the equipment is again in operation, the permittee shall notify the Air Compliance Manager, West Central Regional Office in writing.

(9 VAC 5-80-110, 9 VAC 5-20-180 C, 9 VAC 5-80-850, Condition 30 of the 12/30/03 permit, Condition 27 of the 2/15/06 permit, Condition 27 of the 3/6/06 permit, and Condition 24 of the 3/16/06 permit)

3. **Reports for Facility or Control Equipment Malfunction** - Within 30 days of a failure or malfunction that is expected to exist for 30 days or more, and semi-monthly thereafter until the failure or malfunction is corrected, the permittee shall furnish written reports to the Air Compliance Manager, West Central Regional Office, that contain the following:
 - a. Identification of the specific facility that is affected as well as its location and registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of air pollutant emissions likely to occur during the breakdown period;
 - d. Measures taken to reduce emissions to the lowest amount practicable during the breakdown period;
 - e. A statement as to why the owner was unable to obtain repair parts or perform repairs that which would allow compliance with the provisions of these regulations within 30 days of the malfunction or failure;
 - f. An estimate, with reasons given, of the duration of the shortage of repairs or repair parts which would allow compliance with the provisions of these regulations; and
 - g. Any other pertinent information as may be requested by the board.

(9 VAC 5-80-110, 9 VAC 5-20-180 D, 9 VAC 5-80-850, Condition 28 of the 2/15/06 permit, Condition 28 of the 3/6/06 permit, and Condition 25 of the 3/16/06 permit)

General plantwide reporting conditions are contained in Section IX - General Conditions.

VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
07	Texture Sand Processing	5-80-720 B	PM ₁₀	5 ton/hr
08	35 Kiln Car Vacuum Cleaner	5-80-720 B	PM ₁₀	N/A
09	36 Kiln Car Vacuum Cleaner	5-80-720 B	PM ₁₀	N/A
10	Oil (Lubricating) Tank	5-80-720 B	VOC	18,000 Gallon
11	Diesel Fuel Tank	5-80-720 B	VOC	2,000 Gallon
12	Sand Storage Silo	5-80-720 B	PM ₁₀	100 Ton Capacity.

These insignificant emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VII. Compliance Plan

This facility is currently in compliance with all current requirements.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliant with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements that have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of applicability
40 CFR 60 Subpart UUU (40 CFR 60.730 through 60.737)	Standards of Performance for Calciners and Dryers in Mineral Industries	40 CFR 60.730 (c) definitions: applies to facilities constructed, modified or reconstructed after April 23, 1986. This subpart does not apply to General Shale Brick, Inc. Tunnel kilns generally are not subject to this Subpart.

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the

owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
- d. For each opacity limit exceedance or malfunction as prescribed by 40 CFR 60 Subpart OOO, the report shall include for each period of excess emissions the commencement and completion dates and times, and the magnitude of excess emissions. Specifically identify each period of excess emissions that occurs during startups, shutdowns, malfunctions, and the cause of any malfunction (if known) and the corrective action and preventative measures taken.
- e. The weekly records required for the visible emissions observations utilizing 40 CFR 60 Appendix A, Method 22 techniques shall consist of a written log of dates, times, sources, and result of each visible emission observation, as well as a records of the person or persons performing the periodic observations. These records shall be retained on site for the most recent five (5) year period and made available to the DEQ upon request.
- f. Report recipients: The semi-annual reports required by this Title V operating permit shall be sent to the Air Compliance Manager, West Central Regional Office. The reports additionally required by 40 CFR 60.676 et seq. NSPS Subpart OOO for the hammermill and No. 1 Cage Mill shall be sent to the Air Compliance Manager, West Central Regional Office, and unless directed otherwise, to EPA at the following address:

Chief
Air Enforcement Branch (3AP13)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. This annual compliance certification shall be sent to the following addresses:

Air Compliance Manager
VA DEQ
3019 Peters Creek Road
Roanoke, VA 24019

U. S. Environmental Protection Agency, Region III
Clean Air Act Title V Compliance Certification (3AP00)
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Air Compliance Manager, West Central Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Air Compliance Manager, West Central Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within fourteen days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Air Compliance Manager, West Central Region.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

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.
(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board 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. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines 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.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Statements for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading – Not Applicable

BB. Emissions Trading – Not Applicable

X. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor
2. State toxics rule

Two New Source Review permits for this facility contain conditions required under this rule in sections designated “state only enforceable.” These permits are: the 12/30/03 minor NSR permit, as amended 7/5/05; and the 2/15/06 minor NSR permit. These permits are attached as appendices to the statement of legal and factual basis for this permit.

(9 VAC 5-80-110 N and 9 VAC 5-80-300)