

STATE OF MISSOURI

PERMIT BOOK



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 052011-006

Project Number: 2011-01-067
Installation ID: 187-0063

Parent Company: Central Stone Company

Parent Company Address: 1705 5th Ave., Moline, IL 61265

Installation Name: St. Francois Quarry CS54

Installation Address: 2339 Highway H, Farmington, MO 63640

Location Information: St. Francois County, S24, T35N, R5E

Application for Authority to Construct was made for:

The replacement of the existing grizzly feeder and primary crusher of the rock-crushing plant. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAY 13 2011

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James L. Kavanaugh".
DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The Special Conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

1. **Superseding Condition**
The conditions of this permit supersede all Special Conditions found in the previously issued Construction Permit # 032005-033 from the Air Pollution Control Program.
2. **Generic Plant Designation and Maximum Combined Hourly Design Rate**
St. Francois Quarry CS54 has been designated to be a Generic Plant Operation. The combined Maximum Hourly Design Rate (MHDR) of the following generic equipment types shall not exceed the rates and numbers listed below.

Equipment Type	Maximum Combined Hourly Design Rate	Maximum Number of Units
Primary Unit(s) (Primary Crusher)	400 tons per hour	1
Feeder/Grizzly	700 tons per hour	1
Crusher(s) including primary crusher	1,025 tons per hour	5
Conveyor(s), Stacker(s)	12,500 tons per hour	75
Screen(s)	1,250 tons per hour	8

3. **Generic Plant Equipment Identification Requirement**
 - A. St. Francois Quarry CS54 shall submit the following information to the Air Pollution Control Program's Permitting Section and the Southeast Regional Office within 15 days of actual startup.
 - 1) A master list of all equipment that will be permitted for use with the generic plant. This master list shall include at minimum the following information for each piece of equipment:
 - a) Manufacturer's name
 - b) Model number
 - c) Serial number
 - d) Unrestricted maximum MHDR
 - e) Date of manufacture
 - f) Any other additional information that is necessary to uniquely identify the equipment.
 - 2) A list of the core equipment that will always be utilized with the generic plant. The core equipment associated with the generic plant shall include at least one primary unit that controls the rate of the process flow (e.g., a primary crusher or primary screen).
 - 3) A determination of the applicability of 40 CFR Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" for each piece of equipment indicating whether each piece of equipment is

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GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

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- subject to Subpart OOO and justification for this determination.
- 4) St. Francois Quarry CS54 shall notify the Air Pollution Control Program's Permitting Section and the Southeast Regional Office when new equipment is added to the master list and when core equipment is changed within 30 days of the change.
 - B. St. Francois Quarry CS54 shall maintain a list of the specific equipment currently being utilized with the generic plant. Any arrangement of the generic plant's equipment must be such that the core equipment is not bypassed in the process flow.
 4. Equipment Identification Requirement
St. Francois Quarry CS54 shall maintain easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component.
 5. Record Keeping Requirement
St. Francois Quarry CS54 shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.
 6. Reporting Requirement
St. Francois Quarry CS54 shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.

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Project No.	2011-01-067

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The Special Conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

1. Superseding Condition
 - A. The conditions of this permit supersede all Special Conditions found in the previously issued construction permit 032005-033 from the Air Pollution Control Program.

2. Best Management Practices Requirement

St. Francois Quarry CS54 shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment AA.

3. Ambient Air Impact Limitation
 - A. St. Francois Quarry shall not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) for particulate matter less than ten microns in aerodynamic diameter (PM₁₀) of 150.0 µg/m³ 24-hour average in ambient air.

 - B. St. Francois Quarry shall demonstrate compliance with Special Condition 3.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

4. Annual Emission Limit
 - A. St. Francois Quarry CS54 shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation.

 - B. St. Francois Quarry CS54 shall demonstrate compliance with Special Condition 4.A using Attachment B or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

5. Moisture Content Testing Requirement
 - A. St. Francois Quarry CS54 shall verify that the moisture content of the processed rock is greater than or equal to 1.5% weight.

 - B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566 or another method approved by the Director.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- C. The initial test shall be conducted no later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test during the months of July or August.
 - D. The test samples shall be taken from rock that has been processed by the plant or from each source of aggregate (e.g. quarry).
 - E. The written analytical report shall include the raw data and moisture content of each sample, the test date and the original signature of the individual performing the test. The report shall be filed on-site or at the St. Francois Quarry CS54 main office within 30 days of completion of the required test.
 - F. If the moisture content of either of the two tests is less than the moisture content in Special Condition 5.A, another test may be performed within 15 days of the noncompliant test. If the results of that test also exceed the limit, St. Francois Quarry CS54 shall either:
 - 1) Apply for a new permit to account for the revised information, or
 - 2) Submit a plan for the installation of wet spray devices to the Air Pollution Control Program Compliance Assistance section within 10 days of the second noncompliant test. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.
 - G. In lieu of testing, St. Francois Quarry CS54 may obtain test results that demonstrate compliance with the moisture content in Special Condition 5.A from the supplier of the aggregate.
6. Minimum Distance to Property Boundary Requirement
The primary emission point shall be located at least 400 feet from the nearest property boundary.
7. Concurrent Operation Restriction
St. Francois Quarry CS54 is prohibited from operating whenever other plants are located at the site.
8. Primary Equipment Requirement
St. Francois Quarry CS54 shall process all rock through the primary crusher (EP-2A-1). Bypassing the primary crusher is prohibited.
9. Record Keeping Requirement
St. Francois Quarry CS54 shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources personnel upon request.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

10. Reporting Requirement
St. Francois Quarry CS54 shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2011-01-067
Installation ID Number: 187-0063
Permit Number:

St. Francois Quarry CS54
2339 Highway H
Farmington, MO 63640

Complete: February 16, 2011

Parent Company:
Central Stone Company
1705 5th Ave.
Moline, IL 61265

St. Francois County, S24, T35N, R5E

PROJECT DESCRIPTION

Central Stone Company owns and operates St. Francois Quarry CS54, where rock, composed of non-metallic minerals, is drilled/blasted, loaded into haul trucks, and transported to processing. Rock is processed through feeder(s), crusher(s), screen(s), conveyor(s), and bin(s). Processing equipment is no longer powered by diesel generators, as previously permitted, and is now powered by electricity. A generic construction permit (Permit # 032005-033) was issued to this quarry in 2005 and it currently operates under a basic operating permit (Project # 2010-01-018). Central Stone wishes to replace its existing primary crusher that is rated at 375 tons per hour with a crusher that is rated at 400 tons per hour and replace its existing grizzly feeder that is rated at 500 tons per hour with a grizzly feeder that is rated at 700 tons per hour. Because the primary crusher is the primary unit of this installation, this rock-crushing plant is bottlenecked at 400 tons per hour of production.

Also, St. Francois Quarry CS54 wishes to decrease its minimum distance to its property boundary from 600 feet, as permitted in Permit # 032005-033, to 400 feet to add flexibility to the operation of its in-pit movable crusher, the primary crusher (EP-2A-1). This crusher moves within the site and operates inside the pit. A 400 foot minimum distance to its property boundary will allow St. Francois Quarry CS54 to crush and classify rock at more locations within its site.

The applicant is using one of the methods described in Attachment AA, "Best Management Practices," to control emissions from haul roads and vehicular activity areas. This installation is located in St. Francois County, an attainment area for all criteria pollutants. This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

TABLES

The following permits have been issued to St. Francois Quarry CS54 from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
032005-033	Modification to the rock-crushing plant
102002-003	Equipment and production increase
0195-005	Construction of the rock-crushing plant

The table below summarizes the emissions of this project. The existing potential emissions are taken from Construction Permit # 102002-003, which includes permit limits. The average existing actual emissions were taken from the previous years' Emissions Inventory Questionnaire (EIQ). Potential emissions of the plant represent the emissions of the plant with the new primary crusher and grizzly feeder assuming continuous operation (8760 hours per year). Since this project is a modification of existing emission units, the emissions increase of the project was calculated using a potential minus actual method. The emissions increase of the application for the debottlenecked emission units in the rock-crushing plant was calculated as the potential emissions of the plant minus the average existing actual emissions for the years 2009 and 2010. The emissions increase of PM₁₀ and PM_{2.5} of the application is above their respective de minimis level and to avoid refined modeling, a voluntary PM₁₀ limit of 15.0 tons per year was taken. The installation conditioned potential emissions are based on this voluntary PM₁₀ limit of 15.0 tons per year.

Table 2: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level	Existing Potential Emissions	Average Existing Actual Emissions (2009 & 2010 EIQ)	Potential Emissions of the Plant	Emissions Increase of the Application	¹ Installation Conditioned Potential Emissions
PM ₁₀	15.0	< 50.0	1.56	37.37	35.81	< 15.0
PM _{2.5}	10.0	N/D	0.02	13.56	13.54	5.87
SO _x	40.0	N/A	N/D	N/A	N/A	N/A
NO _x	40.0	< 40.0	N/D	N/A	N/A	N/A
VOC	40.0	N/A	N/D	N/A	N/A	N/A
CO	100.0	N/A	N/D	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/D	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

¹ Installation conditioned potential emissions account for sources with limited hours of operation, which include crushing and classifying equipment, and sources that emit continuously such as wind erosion from storage piles.

Table 3: Ambient Air Quality Impact Analysis

Pollutant	¹ NAAQS (µg/m ³)	Averaging Time	² Maximum Modeled Impact (µg/m ³)	Total Limited Impact (µg/m ³)	³ Background (µg/m ³)	Daily Production (tons/day)
⁴ PM ₁₀ (solitary)	150.0	24-hour	205.41	130.0	20.0	6,604.5

¹ National Ambient Air Quality Standards (NAAQS)

² Modeled impact at maximum capacity with controls

³ Background includes emissions from haul roads and stock piles

⁴ Solitary operation of the St. Francois Quarry CS54

EMISSIONS CALCULATIONS

Emissions for the project were calculated using emission factors found in the United States Environmental Protection Agency (EPA) document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

Emissions from the rock-crushing equipment were calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. The controlled emission factors were used because the inherent moisture content of the crushed rock is greater than 1.5% weight.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006. A 90% control efficiency is applied to the emission calculations for the use of BMPs. Emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4 "Aggregate Handling and Storage Piles," November 2006. The moisture content of the aggregate is 1.5% weight. Emissions from wind erosion of storage piles were calculated using an equation found in the Air Pollution Control Program's Emissions Inventory Questionnaire Form 2.8 "Storage Pile Worksheet."

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 3. The Air Pollution Control Program requires an AAQIA of PM₁₀ for all asphalt, concrete and rock-crushing plants regardless of the level of PM₁₀ emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software SCREEN3. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS) or Risk Assessment Level (RAL) for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS or RAL, the plant's production is limited to ensure compliance with the standard. In cases where the plant is providing material for a highway project, the ambient impact is evaluated in accordance with a memorandum issued by the Air Pollution Control Program titled "Permitting Asphalt/Concrete Plants for Temporary Highway Projects," dated April 10, 2000. This memorandum states that air quality should be analyzed at the nearest residence or location where the public could reasonably be expected to be found instead of all ambient air. This practice generally allows for a less restrictive daily production level while protecting the public.

This plant uses BMPs to control emissions from haul roads and vehicular activity areas, so emissions from these sources were not included in the AAQIA. Instead they were addressed as a background concentration of 20.0 µg/m³ of PM₁₀ in accordance with the Air Pollution Control Program's BMPs interim policy.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

St. Francois Quarry CS54 shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required on April 1 for paper submittals or May 1 for MOEIS submittals for the previous year's emissions. Payment of emission fee is required by June 1.
- An update to your Basic Operating Permit application is required for this installation within 30 days of equipment startup.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the equipment. 40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" applies to the equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) apply to the proposed equipment.
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with Special Conditions.

Daronn A. Williams
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 24, 2011, received January 26, 2011, designating Central Stone Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated March 10, 2011.

Attachment A: Ambient Impact Tracking Sheet
St. Francois Quarry (187-0063)
Project Number: 2011-01-067

Site Name: St. Francois Quarry CS54
 Site Address: 2339 Highway H, Farmington, MO 63640
 Site County: St. Francois County, S24, T35N, R5E

This sheet covers the period from _____ to _____ (Copy as needed)
 (Month, Day Year) (Month, Day Year)

Date	St. Francois Quarry CS54 187-0063			Same Owner			Separate Owner			² Back-ground ($\mu\text{g}/\text{m}^3$)	³ Total Impact ($\mu\text{g}/\text{m}^3$)
	Daily Production (tons)	Impact Factor ($\mu\text{g}/\text{m}^3/\text{ton}$)	¹ Impact ($\mu\text{g}/\text{m}^3$)	Daily Production (tons)	Impact Factor ($\mu\text{g}/\text{m}^3/\text{ton}$)	Impact ($\mu\text{g}/\text{m}^3$)	Daily Production (tons)	Impact Factor ($\mu\text{g}/\text{m}^3/\text{ton}$)	Impact ($\mu\text{g}/\text{m}^3$)		
<i>Example</i>	6,000	0.0197	118.20	N/A	N/A	N/A	N/A	N/A	N/A	20.00	138.20
		0.0197		N/A	N/A	N/A	N/A	N/A	N/A	20.00	
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		0.0197		N/A	N/A	N/A	N/A	N/A	N/A	20.00	
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		0.0197		N/A	N/A	N/A	N/A	N/A	N/A	20.00	
		0.0197		N/A	N/A	N/A	N/A	N/A	N/A	20.00	

Note 1: The Daily PM_{10} Impact ($\mu\text{g}/\text{m}^3$) for St. Francois Quarry CS54 is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.
 Note 2: Background PM_{10} Level ($\mu\text{g}/\text{m}^3$) is from Haul Roads and Stockpiles using BMPs.
 Note 3: The Total Impact is calculated by adding the applicable impacts and background. A total impact of less than **150.0** $\mu\text{g}/\text{m}^3$ in any 24-hour period indicates compliance

Attachment B: PM₁₀ Annual Emissions Tracking Sheet

St. Francois Quarry (187-0063)

Project Number: 2011-01-067

Permit Number:

Site Name: St. Francois Quarry CS54

Site Address: 2339 Highway H, Farmington, MO 63640

Site County: St. Francois County, S24, T35N, R5E

This sheet covers the period from _____ to _____ (Copy as needed)
(Month, Day Year) (Month, Day Year)

Month	Production (tons)	Emission Factor (lb/ton)	Monthly Emissions ¹ (lbs)	Monthly Emissions ² (tons)	12-Month Total Emissions ³ (tons)
<i>Example</i>	<i>192,000</i>	<i>0.0213</i>	<i>4,089.6</i>	<i>2.045</i>	<i>2.045</i>
<i>Example</i>	<i>192,000</i>	<i>0.0213</i>	<i>4,089.6</i>	<i>2.045</i>	<i>4.09</i>
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Note 1: Multiply the monthly production by the emission factor.

Note 2: Divide the monthly emissions (lbs) by 2000.

Note 3: Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than **15.0** is necessary for compliance.

Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable plant is operating.

1. Pavement
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources personnel upon request.

3. Application of Water-Documented Daily
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rationale for not watering (e.g. freezing conditions or not operating).
 - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources personnel upon request.

¹For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)

Mr. Tom Barnum
Manager, Environmental Services
St. Francois Quarry CS54
1705 5th Ave.
Moline, IL 61265

RE: New Source Review Permit - Project Number: 2011-01-067

Dear Mr. Barnum:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the Special Conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Daronn A. Williams, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:dwl

Enclosures

c: Southeast Regional Office
PAMS File: 2011-01-067

Permit Number: