

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

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OCT 15 2013

Mr. Jonathan Kennedy
Environmental & Regulatory Affairs Manager
Mississippi Lime Company
16147 U.S. Highway 61
Ste. Genevieve, MO 63670

RE: New Source Review Temporary Permit Request - Project Number: 2013-08-031
Installation ID Number: 186-0001
Temporary Permit Number: **102013-009**
Expiration Date: July 12, 2014

Dear Mr. Kennedy:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install three additional conveyors at your temporary limestone crushing operations in Ste. Genevieve County (S29, T38N, R9E). The Air Pollution Control Program is hereby granting your request in accordance with Missouri State Rule 10 CSR 10-6.060(3).

On June 20, 2013, your facility suffered a fire at your secondary crushing plant located in the limestone mine. The fire damaged the permitted secondary crushers, screens, and conveyor belts. While the damaged equipment is being repaired, the facility asked the Air Pollution Control Program's Compliance and Enforcement Section to allow the facility to bring in a small portable crushing and screening operation and place it outside the mine to supply crushed limestone to the plant. This request was submitted by the company on June 21, 2013, and approved by the Air Pollution Control Program on the same day. On June 25, 2013, the facility submitted another request to the Air Pollution Control Program to move the above mentioned portable crushing plant inside the mine (now referred to as "underground") and to allow another portable crushing plant, owned by Fred Weber, Inc. (PORT-0641), to operate at the site on the surface. This request was approved on June 26, 2013, provided that the facility applies for and receives a temporary permit from the Air Pollution Control Program by July 12, 2013, that includes both crushing operations. The temporary permit was issued on July 17, 2013 under Permit Number 072013-007. However, after this permit was issued, the facility submitted another request to add three conveyors to the underground crushing operation. Since this request came so soon after the issuance of the previous permit, it is considered part of the same project. Therefore, this permit not only includes the three (3) additional conveyors, but also includes equipment permitted in Permit 072013-007. The special conditions in this permit supersede all special conditions in Permit 072013-007.

Uncontrolled emission factors from Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition, Chapter 11.19.2, *Crushed Stone Processing and Pulverized Mineral Processing*, (8/2004), were used to calculate emissions of particulate matter less than two-and-a-half microns (PM_{2.5}), particulate matter less than ten microns (PM₁₀), and particulate matter (PM). A 90% control efficiency was added to the uncontrolled emission factors due to the high humidity and low air velocity underground. This control efficiency was approved for use in Permit 072013-007 under the requirement that all of the equipment be located no less than 800 feet from the mine entrance. Therefore, that requirement is written as a special condition in this permit.

Table 1 below gives an emissions summary for this project. The existing potential emission is from the equipment of crushing operations without the three new conveyors. The potential emissions of the application are the emissions of the crushing operations with the three new conveyors. The PM conditioned potential emissions are limited to 25.0 tons per year so that the facility does not have to apply for a Prevention of Significant Deterioration permit. This is the same limit as given in Permit 072013-007, but now the facility will have to include the emissions from the three (3) additional conveyors. With the PM limit, the PM₁₀ emissions would also be limited under the *de minimis* level of 15.0 tons per year.

Table 1: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	Existing Potential Emissions	Existing Actual Emissions (2012 EIQ)	Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	85.97	N/D	86.95	<25.0
PM ₁₀	15.0	33.41	N/D	33.77	9.71
PM _{2.5}	10.0	9.01	N/D	9.11	2.62
SO _x	40.0	N/A	N/D	N/A	N/A
NO _x	40.0	N/A	N/D	N/A	N/A
VOC	40.0	N/A	N/D	N/A	N/A
CO	100.0	N/A	N/D	N/A	N/A
Total HAPs	25.0	N/A	N/D	N/A	N/A

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

The two crushing plants operate independently of each other and will be powered by a total of four diesel engines (one rated at 365 horsepower, one at 129 horsepower, and two at 49 horsepower). Although Fred Weber, Inc. owns one of the plants, the entire permit is issued under Mississippi Lime Company and Mississippi Lime Company will be responsible for ensuring compliance with the permit conditions. The underground plant has a maximum hourly design rate (MHDR) of 250 tons per hour while the Fred Weber crushing plant is rated at 500 tons per hour.

Emissions from the diesel engines were not calculated for this review. The engines are designed to be portable (i.e. equipped with wheels, skids, carrying handles, trailers, etc.) and will be at this site for less than 12 consecutive months. As a result, the engines can be considered nonroad in accordance with 40 CFR §89.2.


Mr. Kennedy
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You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating 10 CSR 10-6.045 *Open Burning Requirements*, 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.165 *Restriction of Emission of Odors*, and 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*. Subpart 000 *Standards of Performance for Nonmetallic Mineral Processing Plants*, of the New Source Performance Standards (NSPS) applies to the above ground crushing plant, but not to the underground crushing plant.

A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this determination, please do not hesitate to contact Chia-Wei Young at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM


Kyra L. Moore
Director

KLM:cyl

c: PAMS File: 2013-08-031
Southeast Regional Office

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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."

Site ID Number: 186-0001

Site Name: Mississippi Lime

Site Address: 16147 U.S. Highway 61

Site County: Ste. Genevieve (S29, T38N, R9E)

1. **Superseding Condition**
The conditions of this permit supersede all special conditions in the previously issued construction permit 072013-007 from the Air Pollution Control Program.
2. **Best Management Practices Requirement**
Mississippi Lime Company shall control fugitive emissions from the outside haul road (TEMP HR 2) and outside vehicular activity area (TEMP SP1) used by the temporary crushers by performing Best Management Practices as defined in Attachment AA.
3. **Annual Emission Limit**
 - A. Mississippi Lime Company shall emit less than 25.0 tons of particulate matter (PM) in any 12-month period from the underground crushing operation and the Fred Weber crushing plant combined.
 - B. Mississippi Lime Company 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. **Wet Suppression Control System Requirement**
 - A. Mississippi Lime Company shall install and operate wet spray devices on all crushers (TEMP 6 and 14) and the screen (TEMP 10) at Fred Weber's crushing plant (PORT-0641).
 - B. Watering may be suspended during periods of freezing condition, when use of the wet spray devices may damage the equipment. During these conditions, Mississippi Lime Company shall adjust the production rate to control emissions from these units. Mississippi Lime Company shall record a brief description of such events