

PERMIT BOOK



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

DEPARTMENT OF NATURAL RESOURCES

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AUG 19 2014

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: 2014-07-045

Installation ID Number: 186-0001
Temporary Permit Number: **08 2014 - 010**
Expiration Date: February 4, 2015

Dear Mr. Kennedy:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to construct a temporary crusher and ancillary equipment at Mississippi Lime Company, located in Ste. Genevieve, Missouri. The Air Pollution Control Program is hereby granting your request to conduct this temporary operation at this location in accordance with Missouri State Rule 10 CSR 10-6.060(3). The confidential review was completed under project number 2014-07-046.

Due to recent events, Mississippi Lime Company (MLC) has had to draw from sized inventories stored in their underground mine. MLC has requested to construct a crusher and ancillary equipment to replenish these inventories stored in the underground mine.

This project consists of a temporary vibrating feeder, crusher, seven conveyors, storage pile, and diesel generator set. The operations of this project will take place within the underground mine (■). The temporary crushing plant has a maximum hourly design rate of ■ tons of rock crushed per hour. The rock will be transferred to the vibrating feeder (TEMP 1) with a front end loader. The rock will then be processed through the crusher (TEMP 2) and conveyed (TEMP 3-7) to the appropriate storage piles (TEMP SP1 or existing EP-813). This equipment is powered by a ■ brake horsepower engine rated at ■ gallons per hour.

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. Per an Air Pollution Control Program determination for estimating underground mining emissions, a control efficiency of █ percent (%) was used because the crushing operation takes place more than █ feet within the underground mine.

The emission factors for storage pile handling were calculated using the drop point equation found in AP-42, Section 13.2.4 *Aggregate Handling and Storage Piles* (November 2006). The controlled emission factors were used because the inherent moisture content of the crushed rock within the mine is at least █ % by weight.

Emissions from haul roads and vehicular activity areas occur beyond █ feet within the underground mine, thus they were not calculated per an Air Pollution Control Program determination for estimating underground mining emissions.

The engine emissions were not evaluated for this review as the engine at this site is classified as a nonroad engine. 40 CFR 63 Subpart ZZZZ, "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and 40 CFR 60 Subpart III, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" do not apply. The nonroad engine is subject to further applicable requirements in 40 CFR 89 and 40 CFR 1039 which are outside the purview of this program.

The table below summarizes the emissions of this project. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions account for six months (4380 hours) of operation, limited per the expiration of this temporary permit.

Table 1: Emissions Summary (tons per year)

| Air Pollutant | De Minimis Level/SMAL | ^a Potential Emissions of the Application | ^b Conditioned the Potential Emissions |
|-------------------|-----------------------|---|--|
| PM | 25.0 | 15.94 | 7.58 |
| PM ₁₀ | 15.0 | 6.91 | 3.31 |
| PM _{2.5} | 10.0 | 1.34 | 0.63 |
| SO _x | 40.0 | N/A | N/A |
| NO _x | 40.0 | N/A | N/A |
| VOC | 40.0 | N/A | N/A |
| CO | 100.0 | N/A | N/A |
| Total HAPs | 10.0/25.0 | N/A | N/A |

N/A = Not Applicable;

^aIncludes site specific haul road and storage pile emissions

^bAccounts for six months of operation, limited by the expiration of this temporary permit.

The ambient air quality impact analysis was not considered in this project because the crushing operation takes place more than █ feet within the underground mine.

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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*.

A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon verbal request. If you have any questions regarding this determination, please do not hesitate to contact Bryce Mihalevich at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 75 1-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyra L. Moore
Director

KLM:bml

c: PAMS File: 2014-07-045
Southeast Regional Office