



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

DEPARTMENT OF NATURAL RESOURCES

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AUG 06 2014

Mr. Jim Lanzafame
 Environmental Compliance
 The Doe Run Company – Sweetwater Mine/Mill
 P. O. Box 500
 Viburnum, MO 65566

RE: New Source Review Temporary Permit Request - Project Number: 2014-05-053

Installation ID Number: 179-0004

Temporary Permit Number: **082014-003**

Expiration Date: January 15, 2015

Dear Mr. Lanzafame:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install a temporary aboveground screen at The Doe Run Company's Sweetwater Mine/Mill, located in Viburnum, Missouri (S22, T31N, R2W). 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 Doe Run Company has submitted an Application For Authority to Construct to operate a temporary aboveground screen at The Doe Run Company's Sweetwater Mine/Mill. This is a portable METSO CV-100 model that is rated at 300 tons per hour. This screen will not have conveyors or other equipment associated with it and the screen will be used to screen out undesirable containments (such as trash, rubber, pieces of metal, etc) from previously processed rock. The screened material will be stockpiled and the screened ore will be fed into an aboveground crushing plant for processing via a frontend loader. The undesirable containments will be discarded appropriately. The crushing plant is an existing "grandfathered" plant that does not have to track production or ambient impact. It operates under a basic operating permit (Project 2012-05-019). The screen of this project will operate independently of the existing crushing plant. Ambient air quality standards are not expected to be threatened by the addition of this screen.

The screen will be powered by a 2011 44 horsepower Deutz F4L diesel engine, but because this screen and the engine will be on site for less than 12 consecutive months, this engine is considered a nonroad engine and its emissions were not included in this project.

Per 10 CSR 10-6.060(3), temporary installations and pilot plants may be granted a temporary permit if their potential to emit is under 100 tons per year of each pollutant. Due to the voluntary limit of lead emissions, this project's potential particulate matter (PM) and particulate matter less than 10 microns in aerodynamic diameter (PM₁₀) emissions are above their respective de minimis level but are less than 100 tons per year. Since the screen will operate at this site for less than six months, its emissions are expected to be considerably less than what is shown in Table 1.

The following table provides an emissions summary for this project. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emission of the project is based on a limit of 0.01 tons per year of lead to avoid modeling requirements.

Table 1: Emissions Summary (tons per year)

Pollutant	<i>De Minimis</i> Level/SMAL	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application	Conditioned Potential Emissions ^a
PM	25.0	N/D	220.32	56.34
PM ₁₀	15.0	39.77	82.87	21.19
PM _{2.5}	10.0	5.99	19.38	4.96
SO _x	40.0	N/D	N/A	N/A
NO _x	40.0	N/D	N/A	N/A
VOC	40.0	2.46	N/A	N/A
CO	100.0	N/D	N/A	N/A
Lead Compounds	10.0/0.01 ^b	0.29	0.039	< 0.01 ^c
Total HAPs	25.0	0.15 ^d	0.039	0.01 ^c

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

^a The conditioned potential emission of the project is based on a limit of 0.01 tons per year of lead to avoid modeling requirements.

^b Screening Model Action Level (SMAL)

^c This permit only requires the tracking of lead emissions of this project.

^d Actual lead emissions were not included in the total HAP emissions because they were reported as a speciated pollutant.

Particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}), PM₁₀ and PM emissions of this project were calculated using emission factors developed from an emission test conducted by TRC Environmental Corporation at the Westfork Mine, which was operated by ASARCO near Bunker, Missouri. This emission test was approved by the program's Enforcement Section on December 16, 1997. The test only provided an emission factor for PM emissions, so it was conservatively assumed that PM_{2.5} and PM₁₀ emissions will be equal to PM emissions. Lead emissions were calculated by multiplying the PM emissions by the maximum lead content in the rock. In the last five years, the highest lead content processed in the mill was 3.72%. Therefore, a conservative approach was taken and the highest lead content in the rock the facility will process is estimated to be up to 3.72%.

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PERMIT BOOK

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*. 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants" does not apply to this screen because it operates independently of an existing "grandfathered" crusher that was constructed before May 13, 1982.

A copy of this letter and your permit must be kept on-site with the plant and be made available to Department of Natural Resources personnel upon request. If we can be of further assistance, please contact Daronn A. Williams at the department's Air Pollution Control Program, P.O. Box 176 Jefferson City, MO 65102 or you may telephone (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyra L. Moore
Director

KLM:dwl

c: PAMS File: 2014-05-053
Southeast Regional Office