

# PERMIT BOOK

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

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

www.dnr.mo.gov

APR 12 2011

CERTIFIED MAIL: 70052570000215831026  
RETURN RECEIPT REQUESTED

Mr. Steve Froisland  
Environmental Engineer  
Unimin Corporation  
2968 Highway Z  
Pevely, MO 63070

RE: New Source Review Temporary Permit Request - Project Number: 2011-01-047  
Installation ID Number: 099-0013  
Temporary Permit Number: 042011-001  
Expiration Date: May 23, 2011

Dear Mr. Froisland:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install a temporary crushing and screening operation at your sand mining and processing facility in Pevely, 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).

Your facility proposes to test the feasibility of using a self contained crushing and screening unit that consists of a feeder, an impact crusher, a vibrating screen and three conveyors. The temporary equipment is powered by a 335 horsepower diesel generator. During the testing period, the temporary unit will replace an existing crushing unit at the site. The temporary unit has the same maximum hourly design rate (150 tons per hour) as the existing unit and therefore, this project is not expected to debottleneck the plant. The existing crushing unit can only be restarted after testing is complete. It cannot be used during the testing period. The test is being performed to determine if the equipment is viable with the type of material currently being mined at the site. If the unit is determined to be viable, it will be placed at another location in the future. The new unit will not be used to permanently replace the existing crushing unit.

The emissions from the diesel engine are not taken into account for this project because the engine is considered a mobile source (i.e. a nonroad engine). It is designed to be movable and it will be located at this site for less than 12 consecutive months. The only regulated pollutants expected from the rest of the equipment are particulate matter less than two-and-a-half microns in diameter (PM<sub>2.5</sub>) and less than 10 microns in diameter (PM<sub>10</sub>). The potential emission of PM<sub>2.5</sub> is 9.47 tons per year and the potential emission of PM<sub>10</sub> is 17.35 tons per year, which are less than the limit of 100 tons per year required for temporary installations. The potential emissions were calculated based on operating 8,760 hours per year. If calculating emissions based three months of operation (2208 hours) allowed in the temporary permit, the facility has a potential emission of 1.26 tons per year of PM<sub>2.5</sub> and 8.77 tons per year of PM<sub>10</sub>.

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Emission factors used for the calculations are 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*, (8/04).

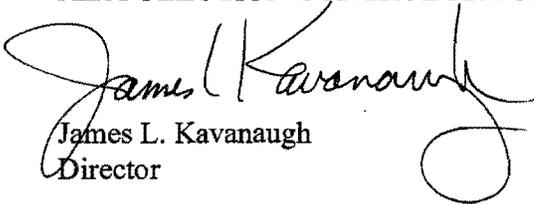
You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating 10 CSR 10-6.045 *Open Burning Requirements*, 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-5.160, *Control of Odors in the Ambient Air*, 10 CSR 10-6.170, and *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*.

None of the New Source Performance Standards apply to the temporary crushing unit. 40 CFR Part 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plant*, of the NSPS does not apply to the proposed equipment because this subpart exempts stone crushing plants with capacity of 150 tons per hour or less. 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engine*, does not apply to the proposed diesel engine because the engine is not stationary. None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment. The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, of the MACT does not apply to the proposed diesel engine because the engine is not stationary. An amendment to your Basic Operating Permit is not needed because the installation is temporary and the facility is only permitted to operate until May 23, 2011.

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. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



James L. Kavanaugh  
Director

JLK:cyl

c: St. Louis Regional Office  
PAMS File: 2011-01-047