



Missouri Department of dnr.mo.gov

**NATURAL RESOURCES**

Michael L. Parson, Governor

Carol S. Comer, Director

September 24, 2020

Meredith Springs  
Environmental Engineer  
Environmental Operations, Inc.  
1530 South Second Street  
St. Louis, MO 63104-4500

RE: New Source Review Temporary Permit Request - Project Number: 2019-08-011  
Expiration Date: Oct. 31, 2021  
Temporary Permit Number: 092020-006

Dear Meredith Springs:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install a temporary crusher at a demolition site located at the corner of South 2<sup>nd</sup> Street and Russell Boulevard in St. Louis, 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(10).

Environmental Operations, Inc. will be installing a temporary concrete crusher at a demolition site. The crusher will be rented from a separate company and the duration of this project is estimated to be eight months. Existing stockpiles of concrete will be crushed and used as fill on-site. There will be a loader on site to load a single primary crusher at a rate of 110 tons per hour. Particulate matter emissions will come from load-in, the crusher, the conveyor, and the stockpile (0.75 acres). The crusher is a tier 4 self-contained unit that will power itself.

This installation is located in St. Louis City with ambient air quality summarized below,

- Marginal nonattainment area for the 2015 ozone 8-hour standard
- Attainment/unclassifiable area for all other criteria pollutants

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 conveying equipment were calculated using emission factors from AP-42 Section 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing,” August 2004. Controlled emission factors for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> were used since the moisture content of asphalt is treated as 1.5% due to the oil that binds the aggregate and contains the particulate matter. Particulate emissions from vehicular activity were calculated using emission factors from equations in AP-42, Chapter 13.2.1 “Paved Roads”, (January 2011) and Chapter 13.2.2, “Unpaved Roads,” (November 2006). Load-in and load-out storage piles were calculated using the predictive equation from AP-42 Section 13.2.4 (November 2006). Emissions from the 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.”

Permission at this site is granted between the time of permit issuance and October 31, 2021. Potential emissions were calculated assuming hours of operation to be 8,760 hours per year. The potential to emit (PTE) particulate matter is summarized below in Table 1. Because the total unconditioned emissions of PM<sub>10</sub> is greater than 15 tons per year, a 15 ton per year limit for PM<sub>10</sub> will be applied to the rock crusher. The proposed temporary permit is granted according to the provisions of Missouri State Rule 10 CSR 10-6.060(10).

Table 1: Emissions Summary (Tons per Year)

Pollutant	Unconditioned Emissions	Conditioned Emissions
PM	79.48	48.83
PM <sub>10</sub>	24.42	< 15.00
PM <sub>2.5</sub>	2.69	1.65

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*, 10 CSR 10-6.170 *Restriction of*

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*Particulate Matter to the Ambient Air Beyond the Premises of Origin*, and 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes*. No New Source Performance Standards (NSPS) apply to the installation. 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" does not apply to the equipment, as the rock crusher is a portable unit.

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 Dakota Fox 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

A handwritten signature in blue ink that reads "Darcy A. Bybee".

Darcy A. Bybee  
Director

DAB:dfa

c: PAMS File: 2019-08-011  
SLRO Regional Office

**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 (3)(E). "Conditions required by permitting authority."*

1. **PM<sub>10</sub> Emission Limitation**
  - A. Environmental Operations, Inc., LLC shall emit less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month period from the rock crusher. SSM emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions shall be included in the limit.
  - B. Attachment A, or an equivalent form using the same emission factors approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.
2. **Record Keeping Requirement**

Environmental Operations, Inc. 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.
3. **Reporting Requirement**

Environmental Operations, Inc. shall report to the Air Pollution Control Program, Compliance / Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than 10 days after any exceedances of the limitations imposed by this permit.

