

**STATE OF MISSOURI**



**DEPARTMENT OF NATURAL RESOURCES**

**MISSOURI AIR CONSERVATION COMMISSION**

**PERMIT TO CONSTRUCT**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **062012-008** Project Number: 2012-05-090  
Installation ID: PORT-0682  
Parent Company: M&M Trucking  
Parent Company Address: 102 East Lusher St., Salisbury, MO 65281  
Installation Name: M&M Trucking at MoDOT Columbia  
Installation Address: 511 Conley Rd, Columbia, MO 65201  
Location Information: Boone County, S8, T48N, R12W

Application for Authority to Construct was made for:  
Self-contained portable crusher with a two deck screen and discharge conveyors. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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- Standard Conditions (on reverse) are applicable to this permit.
  - Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

**JUN 21 2012**

\_\_\_\_\_  
EFFECTIVE DATE

\_\_\_\_\_  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start-up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start-up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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#### GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

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*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."*

1. **Equipment Identification Requirement**  
M&M Trucking shall maintain easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component. These identification numbers must be submitted to the Air Pollution Control Program no later than 15 days after start-up of the portable crushing plant.
2. **Relocation of Portable Rock Crushing Plant**
  - A. M&M Trucking PORT-0682 shall not be operated at any location longer than 12 consecutive months.
  - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable crushing plant.
    - 1) If the portable crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
    - 2) If the portable crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.
3. **Nonroad Engine Requirement**
  - A. M&M Trucking shall construct and operate the plant's internal combustion engine such that it meets the definition of nonroad per 40 CFR 89.2.
  - B. M&M Trucking shall keep records with the plant showing the date and reason for moving the plant.
4. **Record Keeping Requirement**  
M&M Trucking 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.

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**GENERAL SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

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5. Reporting Requirement

M&M Trucking shall report to the Air Pollution Control Program Enforcement Section  
P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances  
of the limitations imposed by this permit.

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**SITE SPECIFIC SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

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*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."*

PORT ID Number: PORT-0682

Site ID Number: 041-0035

Site Name: M&M Trucking at MoDOT Columbia

Site Address: 511 Conley Rd Columbia, MO 65201

Site County: Boone S8, T48N, R12W

1. Wet Suppression Control System Requirement
  - A. M&M Trucking shall install and operate wet spray devices on all crushers.
  - B. Watering may be suspended during periods of freezing condition, when use of the wet spray devices may damage the equipment. During these conditions, M&M Trucking shall lower the production rate to control emissions from these units. M&M Trucking shall record a brief description of such events.
2. Minimum Distance to Property Boundary Requirement  
The self-contained crushing/screening unit shall be located at least 200 feet from the nearest property boundary at this site.
3. Concurrent Operation Restriction  
M&M Trucking is prohibited from operating whenever other plants are located at this site.
4. Primary Equipment Requirement  
M&M Trucking shall process all rock through the self-contained crushing/screening unit. Bypassing this unit is prohibited.
5. Record Keeping Requirement  
M&M Trucking 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.
6. Reporting Requirement  
M&M Trucking shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2012-05-090  
Installation ID Number: PORT-0682  
Permit Number:

M&M Trucking at MoDOT Columbia  
511 Conley Rd  
Columbia, MO 65201

Complete: May 23, 2012

Parent Company:  
M&M Trucking  
102 East Lusher St.  
Salisbury, MO 65281

Boone County, S8, T48N, R12W

### PROJECT DESCRIPTION

M&M Trucking proposes to construct a portable rock/concrete/asphalt crushing plant, PORT-0682. The plant's first location will be the Missouri Department of Transportation Maintenance Building at 511 Conley Rd in Columbia. The crushing plant is an Eagle 1200-25CC, model year 2002, with self-contained grizzly feeder, impact crusher, two deck screen, discharge conveyor, and diesel engine. The crusher's maximum hourly design rate for clean aggregate is 300 tons per hour, but 150 tons per hour when crushing concrete containing rebar, as provided by the applicant.

The engine is a John Deere compression ignition reciprocation internal combustion engine (CI RICE), serial RG6125A014559, manufacture year 2001, 6 cylinders, total displacement 12.5 liters. The engine is rated at 340 horsepower, and is not Tier rated.

This self-contained unit is mounted on axles and wheels and is portable (designed to be towed, but not self-propelled) in nature. The duration of this project and subsequent projects is each expected to be less than 12 consecutive months, therefore the diesel engine meets the 40 CFR 89.2 definition of nonroad at the time of this permit's issuance.

This installation is located in Boone County, an attainment area for all criteria pollutants. This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability. No permits have been issued to M&M Trucking from the Air Pollution Control Program. No other plants are located at the site.

## TABLES

The table below summarizes the emissions of this project. Uncontrolled potential emissions represent the emissions of all equipment and site specific activities assuming continuous operation (8,760 hours per year), operated without wet spray devices. The uncontrolled potential emissions exceed respective de minimis levels, requiring a permit. The controlled potential emissions consider the wet spray devices. No annual emission limits are required.

Table 1: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Uncontrolled Potential Emissions	Controlled Potential Emissions
PM	25.0	N/A	N/A	80.92	7.97
PM <sub>10</sub>	15.0	N/A	N/A	29.03	2.90
PM <sub>2.5</sub>	10.0	N/A	N/A	2.98	0.33
SO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
NO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

Table 2: Ambient Air Quality Impact Analysis

Pollutant	<sup>a</sup> NAAQS (µg/m <sup>3</sup> )	Averaging Time	<sup>b</sup> Maximum Modeled Impact (µg/m <sup>3</sup> )	Limited Impact (µg/m <sup>3</sup> )	Background (µg/m <sup>3</sup> )	<sup>c</sup> Daily Limit (tons/day)
<sup>d</sup> PM <sub>10</sub>	150.0	24-hour	143.65	N/A	0	N/A

<sup>a</sup>National Ambient Air Quality Standards (NAAQS)

<sup>b</sup>Modeled impact at maximum capacity with controls (wet spray)

<sup>c</sup>Indirect limit based on compliance with NAAQS.

<sup>d</sup>Solitary operation

## EMISSIONS CALCULATIONS

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 crushing equipment were calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. The controlled emission factors were used because the equipment is controlled by water spray devices.

The engine emissions were not evaluated for this review. 40 CFR 63 Subpart ZZZZ, "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", and 40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" do not apply. However, if the self-contained plant were to remain in one location for longer than 12 consecutive months, it

would not be in compliance with this permit because engine emissions were not evaluated. It may also not be in compliance with MACT ZZZZ. NSPS IIII does not apply unless the engine is modified or reconstructed and the self-contained plant is in one location for longer than 12 consecutive months.

Emissions from vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006. Emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4. The moisture content of the concrete debris is unknown and by default 0.7% weight. Emissions from 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."

This evaluation does not include haul roads because the project is to crush on-site building debris and leave the crushed material on-site, as it falls from the stacker. Best management practices for haul roads and storage piles are not required. Building debris storage pile emissions were not evaluated, consistent with reviews for stationary rock quarry blast rock. Crushed product storage pile vehicular activity and loadout emissions were not evaluated.

#### AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 2. The Air Pollution Control Program requires an AAQIA of PM<sub>10</sub> for all asphalt, concrete and rock-crushing plants regardless of the level of PM<sub>10</sub> emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software AERSCREEN. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS) or Risk Assessment Level (RAL) for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS or RAL, the plant's production is limited to ensure compliance with the standard. No production limit is required for this site.

#### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Uncontrolled potential emissions of PM and PM<sub>10</sub> are above the respective de minimis level. Controlled potential emissions are below the respective de minimis level.

#### APPLICABLE REQUIREMENTS

M&M Trucking shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based

on information submitted in the application, has been verified at the time this application was approved.

#### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- No Operating Permit is required for this portable installation.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

#### SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the crusher, screens, and conveyors.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
David Little  
Environmental Engineer

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Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 22, 2012, received May 23, 2012, designating M&M Trucking as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Ms. Cherri McConnell  
Owner  
M&M Trucking  
102 East Lusher St.  
Salisbury, MO 65281

RE: New Source Review Permit - Project Number: 2012-05-090

Dear Ms. McConnell:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact David Little, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:dll

Enclosures

c: Northeast Regional Office  
PAMS File: 2012-05-090

Permit Number: