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: 012007-006  Project Number: 2006-09-050

Owner: Marshall Paving Co., Inc.
Owner’s Address: PO Box 297, Marshall, MO 65340
Installation Name: Marshall Paving Co., Inc.
Installation Address: 906 N. Miami, Marshall, MO 65340
Location Information: Saline County, S10, T50N, R21W

Application for Authority to Construct was made for:

The modification of an existing asphalt plant to include the use of Best Management Practices to control fugitive emissions from haul roads and storage piles. Asphalt is produced through a Batch Mix Process. The asphalt plant has a maximum hourly design rate (MHDR) of 317 tons per hour (tph). This review is conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.
☒ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

JAN 11 2007
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. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. 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 as provided in RS Mo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.
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); by the Missouri Rules listed in Title 10, Division 10 of the Codes of State Regulations (specifically 10 CSR 10-6.060); by 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required by permitting authority”; by 10 CSR 10-6.010 “Ambient Air Quality Standards” and 10 CSR 10-6.060 subsections (5)(D) and (6)(A); and by control measures requested by the applicant, in their permit application, to reduce the amount of air pollutants being emitted, in accordance with 10 CSR 10-6.060 paragraph (6)(E)3. Furthermore, one or more of the Subparts of 40 CFR Part 60, New Source Performance Standards (NSPS), applies to this installation.

1. Best Management Practices
   Marshall Paving Co., Inc. shall control fugitive emissions from all of the haul roads and stockpiles at this site by performing Best Management Practices, which include the usage of paving, chemical dust suppressants, or documented watering. These practices are defined in Attachment AA.

2. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. The operator(s) for Marshall Paving Co., Inc.’s asphalt plant (195-P030) shall ensure, while operating at this site, that the ambient impact of PM$_{10}$ at or beyond the nearest property boundary does not exceed 150 µg/m$^3$ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
   B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed. Attachment A, Daily Ambient PM$_{10}$ Impact Tracking Record, or other equivalent form(s), will be used for this purpose.

3. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. The operator(s) shall ensure that Marshall Paving Co., Inc.’s asphalt plant emits less than 20.05 tons of PM$_{10}$ into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and PM$_{10}$. Attachment B, Monthly PM$_{10}$ Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

4. Annual Emission Limit of Carbon Monoxide (CO)
   A. The operator(s) shall ensure that Marshall Paving Co., Inc.’s asphalt plant emits less than 100 tons of CO into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and CO. Attachment C, Monthly Carbon Monoxide (CO) Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

5. Moisture Content Testing of Storage Piles Requirement
   A. The moisture content of the stockpiled rock will reduce particulate emissions. Marshall Paving Co., Inc. claimed the moisture content of the stored rock to be greater than or equal to 1.5 wt.%, which shall be verified by testing.
   B. Testing shall be conducted according to approved methods, such as those prescribed by the American Society for Testing Materials (ASTM D-2216 or C-566), EPA AP-42 Appendix C.2, or other method(s) approved by the Director.
   C. The operator may obtain a copy of the test results of the inherent moisture content from the supplier(s) of the aggregate. Otherwise, the operator shall obtain test samples from each source of untested aggregate. The written analytical report shall include the raw data and moisture content (wt.%) of each sample, the test date, and the original signature of the individual performing the test. Within 30 days of completion of the required tests, the report shall be submitted to the Enforcement section of the Air Pollution Control Program, and a copy shall be sent to the Regional Office.
   D. If the moisture content result of the first test is less than 1.5 wt.%, a second test must be performed within 30 days. If the result of the second test is less than 1.5 wt.%, Marshall Paving Co., Inc. shall apply for a new construction permit to account for the revised information or install wet spray devices on the affected units.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

6. Baghouse(s) Control System Requirements
   A. Marshall Paving Co., Inc. shall install and operate baghouse(s) to restrict the emission of particulate matter. The baghouse(s) must be used whenever these units are in operation. The baghouse(s) shall be installed on the following units: Hot Elevator, Hot Screen, Hot Bin, Mineral Filler Silo, and Rotary Dryer.
   B. The Marshall Paving Co., Inc. shall install instruments to monitor the operating pressure drop across the baghouse. All instruments and control equipment shall be calibrated, maintained and operated according to the manufacturer's preventive maintenance recommendations. The operator(s) shall check and record the pressure drop across the baghouse filter once per operating day during silo loading. The baghouse operating pressure drop shall be maintained according to manufacturer's specifications.
   C. The operator(s) shall conduct and document a quarterly inspection and maintenance of the baghouse for structural component failures, for leaks and wear, and for the cleaning sequence of the baghouse. Replacement bags shall be kept on hand at all times to replace defective bags (The bags shall be made of fibers appropriate for the operating conditions expected to occur). All inspections, corrective actions, and instrument calibrations shall be recorded.

7. Prohibition Against Concurrent Operations Without Further Air Pollution Control Program Review
   The asphalt plant (195-P030) shall not allow any other plant(s) to operate at this site without a new permit review.

8. Restriction on Minimum Distance to Nearest Property Boundary
   The primary emission point of the asphalt plant, which is the stack of the asphalt dryer, shall be located at least 70 feet from the nearest property boundary whenever it is operating at this site.

9. Restriction on the Use of Diesel Engine(s)
   The asphalt plant shall power its equipment using electrical power and not diesel engines. If the company decides to switch to diesel engine(s), a new permit review will be required.

10. Restriction on Fuel Usage
    The asphalt plant shall use only natural gas and/or liquid petroleum gas (LPG) for its asphalt heater and dryer.

11. Record Keeping Requirement
    The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

12. Reporting Requirement
    The operator(s) shall report to the Air Pollution Control Program (APCP) Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedances of the limitations imposed by this permit.

13. Superseding Condition
    The conditions of this permit supersede all special conditions found in the previously issued construction permit(s) (0481-004, 0592-006, 072003-002) from the Air Pollution Control Program.
TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

This permit review is conducted to allow an increase in production limit through the use of Best Management Practices to control fugitive emissions from haul roads and storage piles. The maximum hourly design rate (MHDR) of the plant given in the previous permit (072003-002) is 317 tons per hour (tph), but according to information submitted with the operating permit application and with the emissions inventory questionnaire (EIQ), the plant has an MHDR of 253 tons per hour. The analysis for this permit review is conducted assuming an MHDR of 317 tons per hour.

Hot Mix Asphalt (HMA) is made from non-metallic aggregates and liquid asphaltic cement. The aggregates are first dried in a rotary dryer and then transported to a hot screen where they are classified according to size and dropped into storage bins. The operator of the plant opens the storage bins over a weigh hopper until the desired mix and weight are obtained. The aggregates from the weigh hopper is then dropped, along with liquid asphaltic cement, into a batch mixer to produce HMA. The equipment are powered using electrical power and not diesel engines. There is a diesel engine at the site, but will only be used in emergency situations. An emergency generator is exempt from permitting provided that it operates less than 500 hours per year.

The asphalt plant uses Liquid Petroleum Gas (LPG) for the asphalt dryer and the asphalt heater. For PM$_{10}$, CO, SOx, VOC, and HAPs, the emissions evaluation and PM$_{10}$ ambient impact analysis are based on natural gas usage, because EPA document AP-42, Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition, does not give emission factors from LPG usage. It can be assumed, though, that emissions from LPG usage can be reasonably approximated by using emission factors from natural gas usage for these criteria air pollutants. According to AP-42 Chapter 1, External Combustion Sources, the NOx emissions from LPG usage is approximately 1.5 times the emissions from natural gas usage, so the NOx emissions factor from natural gas usage is multiplied by 1.5 to obtain the emission factor from LPG usage. The asphalt plant can, therefore, also use natural gas in its asphalt dryer and asphalt heater, since it is the source of the emission factors. If the company decides to switch to fuels other than LPG and natural gas, it must receive permission from the Air Pollution Control Program.

The emission points are listed in the attached spreadsheet summary. This installation is classified under the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2, Item 27]. The installation is located in Saline County, an attainment area for all criteria air pollutants.

Table 1. Other Permits Issued for Site 195-P030

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0481-004</td>
<td>4/1/1981</td>
<td>New batch asphalt plant.</td>
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</table>

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutant of concern is Carbon Monoxide (CO). The potential emissions are calculated from the maximum hourly design rate (MHDR) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHDR. The sources of the emission factors and control efficiencies are listed in the section “Permit Documents”. Based on the conditioned potential emissions, the operation is considered a minor source under 10 CSR 10-6.060 section (5).

Based on the previous permit issued to the plant (Permit #072003-002, Project #2003-03-093), the plant has a conditioned potential to emit 5.05 tons of PM$_{10}$ per year. In order to issue this permit as a section (5) permit, the plant must be limited to an increase of 15 tons of PM$_{10}$ per year. Therefore, the new installation conditioned potential shall be limited to 20.05 tons per year.

The asphalt plant has an annual emission limit of less than 100 tons of carbon monoxide (CO) any 12-month period. A composite CO emission factor was developed for the asphalt plant and incorporated into the monthly record keeping table, Attachment B. If the conditioned potential emissions of CO exceeds 100 tons per year, then the operation would be considered a major source under 10 CSR 10-6.060 section (7) or (8).
Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0 N/D</td>
<td>2.68</td>
<td>93.30</td>
<td>&lt;20.05</td>
<td>0.0672</td>
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<tr>
<td>SO$_x$</td>
<td>14.0 N/D</td>
<td>0.06</td>
<td>5.12</td>
<td>1.17 N/A</td>
<td>N/A</td>
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<tr>
<td>NO$_x$</td>
<td>10.0 N/D</td>
<td>1.79</td>
<td>42.23</td>
<td>10.04 N/A</td>
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<td>0.64</td>
<td>9.11</td>
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<td>CO</td>
<td>10.00 N/D</td>
<td>0.30</td>
<td>443.35</td>
<td>&lt;100 N/A</td>
<td>0.4000</td>
<td></td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0 N/D</td>
<td>N/D</td>
<td>8.42</td>
<td>1.90 N/A</td>
<td>N/A</td>
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</tr>
</tbody>
</table>

Note: N/A = Not Applicable
* PM$_{10}$ and CO conditioned potential based on limit in permit conditions. Other pollutants proportionally reduced based on CO conditioned potential.

**AMBIENT AIR QUALITY IMPACT ANALYSIS**

Screening tools are used to evaluate the ambient air impact of the hourly emissions from this operation. The ambient impact is evaluated at a distance of 70 feet to the nearest property boundary. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m$^3$ of PM$_{10}$ at or beyond the nearest property boundary in any single 24-hour period. For sources agreeing to use Best Management Practices (BMPs), as defined in Attachment AA, haul roads and stockpiles are not modeled with screening tools. Instead, they are addressed as a background level of 20 µg/m$^3$ of PM$_{10}$. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m$^3$ of PM$_{10}$ at or beyond the nearest property boundary.

The screening tools are used to develop an ambient impact factor for the asphalt plant. This ambient impact factor is incorporated into the daily record keeping table, Attachment A. Ambient impact analysis is conducted assuming twenty-four (24) hours per day operation of the two (2) asphalt heaters at the site. Therefore, the two (2) asphalt heaters may operate twenty-four (24) hours per day.

Table 3: Ambient Air Quality Impact Analysis of PM$_{10}$, 24-Hour Averaging Time

<table>
<thead>
<tr>
<th>Operation</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>$^1$Impact Without Small Combustion Sources (µg/m$^3$)</th>
<th>$^2$Impact of Small Combustion Sources (µg/m$^3$)</th>
<th>$^3$Background (µg/m$^3$)</th>
<th>$^4$NAAQS (µg/m$^3$)</th>
<th>Daily Production Limit (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solitary</td>
<td>0.0343</td>
<td>126.45</td>
<td>3.55</td>
<td>20.00</td>
<td>150.00</td>
<td>3.683</td>
</tr>
</tbody>
</table>

Note 1: Ambient impact of the plant (µg/m$^3$) without the operation of the two (2) asphalt heaters.
Note 2: Ambient impact (µg/m$^3$) from the twenty-four (24) hours per day operation of the two (2) asphalt heaters.
Note 3: Background impact (µg/m$^3$) from haul roads and storage piles.
Note 4: The sum of impact without small combustion sources (µg/m$^3$), impact of small combustion sources (µg/m$^3$), and background concentration (µg/m$^3$) shall be less than the NAAQS of 150 µg/m$^3$.

**APPLICABLE REQUIREMENTS**

The owner is subject to compliance with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
- Operating Permits, 10 CSR 10-6.065
- An Operating Permit application is required for this 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 10-3.090
- Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400
- Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and the currently promulgated Maximum Achievable Control Technology (MACT) regulations do not 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.

Chia-Wei Young
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Marshall Paving Co., Inc. as the owner and operator of the installation.
- Environmental Protection Agency (EPA) AP-42, Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Northeast Regional Office Site Survey.
- Best Management Practices.
## Attachment A: Daily Ambient PM_{10} Impact Tracking Record

**Marshall Paving Co., Inc., 195-P030 – Asphalt Plant**

### Project Number: 2006-09-050
### County, CSTR: Saline County (S10, T50N, R21W)
### Primary Unit Size: 253 tph
### Distance to Nearest Property Boundary: 70 feet

This sheet covers the period from _______________ to _______________ (Month, Day, Year)  (Copy this sheet as needed.)

<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m^3/ton)</th>
<th>(^1)Daily PM(_{10}) Ambient Impact Without Small Combustion Sources (µg/m(^3))</th>
<th>(^2)Daily PM(_{10}) Ambient Impact from Small Combustion Sources (µg/m(^3))</th>
<th>(^3)Background PM(_{10}) Level (µg/m(^3))</th>
<th>(^4)TOTAL PM(_{10}) Level (µg/m(^3))</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>0.0343</td>
<td>3.55</td>
<td>20.0</td>
<td>20.0</td>
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<td>3.55</td>
<td>20.0</td>
<td>20.0</td>
<td>40.0</td>
</tr>
</tbody>
</table>

**Note 1:** The Daily PM\(_{10}\) Impact (µg/m\(^3\)) Without Small Combustion Sources is calculated by multiplying the Daily Production (tons) by the Ambient Impact Factor.

**Note 2:** The Daily PM\(_{10}\) Ambient Impact from Small Combustion Sources is from the twenty-four (24) hours per day operation of the two (2) asphalt heaters.

**Note 3:** Background PM\(_{10}\) Level (µg/m\(^3\)) is from Haul Roads and Stockpiles.

**Note 4:** The TOTAL PM\(_{10}\) Level (µg/m\(^3\)) is calculated by summing the Daily PM\(_{10}\) Ambient Impact Without Small Combustion Sources, the Daily PM\(_{10}\) Ambient Impact from Small Combustion Sources, and the Background PM\(_{10}\) Level. A TOTAL PM\(_{10}\) Level of less than 150 µg/m\(^3\) in any 24-hour period indicates compliance.
Attachment B: Monthly PM$_{10}$ Emissions Tracking Record  
Marshall Paving Co., Inc., 195-P030 – Asphalt Plant

Project Number: 2006-09-050  
County, CSTR: Saline County (S10, T50N, R21W')  
Primary Unit Size: 253 tph  
Distance to Nearest Property Boundary: 70 feet

This sheet covers the period from ________________ to ________________ (Month, Day, Year)  
(Copy this sheet as needed.)

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<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>$^1$Monthly Emissions Without Small Combustion Sources (tons)</th>
<th>$^2$Monthly Emissions from Small Combustion Sources (tons)</th>
<th>$^3$Total Monthly Emissions (tons)</th>
<th>$^4$12-Month Emissions (tons/year)</th>
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Note 1: The Monthly Emissions Without Small Combustion Sources (tons) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton) and dividing by 2,000.

Note 2: The Monthly Emissions from Small Combustion Sources (tons) are from the twenty-four (24) hours per day operation of the two (2) asphalt heaters.

Note 3: The Total Monthly Emissions (tons) are the sum of Monthly Emissions Without Small Combustion Sources and Monthly Emissions from Small Combustion Sources (tons).

Note 4: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Total Emissions (tons) to the Monthly Total Emissions (tons) of the previous eleven (11) months. A total of less than 20.05 tons in any consecutive 12-month period indicates compliance.
# Attachment C: Monthly Carbon Monoxide (CO) Emissions Tracking Record
Marshall Paving Co., Inc., 195-P030 – Asphalt Plant

Project Number: 2006-09-050  
County, CSTR: Saline County (S10, T50N, R21W')  
Primary Unit Size: 253 tph  
Distance to Nearest Property Boundary: 70 feet

This sheet covers the period from ____________________ to ____________________ (Month, Day, Year)  
(Copy this sheet as needed.)

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<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite CO Emission Factor (lbs/ton)</th>
<th>¹Monthly Emissions Without Small Combustion Sources (tons)</th>
<th>²Monthly Emissions from Small Combustion Sources (tons)</th>
<th>³Total Monthly Emissions (tons)</th>
<th>⁴12-Month Emissions (tons/year)</th>
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Note 3: The Total Monthly Emissions (tons) are the sum of Monthly Emissions Without Small Combustion Sources and Monthly Emissions from Small Combustion Sources (tons).

Note 4: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Total Emissions (tons) to the Monthly Total Emissions (tons) of the previous eleven (11) months. A total of less than 100 tons in any consecutive 12-month period indicates compliance.
Attachment AA: Best Management Practices (BMPs)- Construction Industry

Fugitive Emissions

Construction Industry Sites covered by the Interim Relief Policy shall maintain Best Management Control Practices (BMPs) for fugitive emission areas at their installations when in operation. Options for BMPs are at least one of the following:

For Haul Roads:
1. **Pavement of Road Surfaces** –
   A. The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions” while the plant is operating.
   B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Usage of Chemical Dust Suppressants** –
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. **Usage of Documented Watering** –
   A. The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

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1 For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)
For Vehicle Activity Areas around Open Storage Piles:

1. **Pavement of Stockpile Vehicle Activity Surfaces** –
   A. The operator(s) may pave all or any portion of the vehicle activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.
   B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Usage of Chemical Dust Suppressants** –
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the vehicle activity areas around the open storage piles. The suppressant will be applied in accordance with the manufacturer's suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. **Usage of Documented Watering** –
   A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
Mr. William Rieth  
President  
Marshall Paving Co., Inc.  
PO Box 297  
Marshall, MO 65340  

RE: New Source Review Permit - Project Number: 2006-09-050  

Dear Mr. Rieth:  

Enclosed with this letter is your New Source Review permit. Please review your permit carefully and note the special conditions, if any, and the requirements in your permit.  

Operation in accordance with the conditions and requirements in your permit and the New Source Review Application submitted for project 2006-09-050 is necessary for continued compliance. Your company may be required to amend an existing operating permit or apply for a new operating permit based on this construction permit review. Please contact the Operating Permit Unit of the Air Pollution Control Program at (573) 751-4817 for operating permit requirements. 

The section of the permit entitled “Technical Review of Application for Authority to Construct” should not be separated from the main portion of your permit. The entire permit must be retained in your files. 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, please contact me at (573) 751-4817, or write the Department of Natural Resources’ Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

Kendall Hale, P.E.  
New Source Review Unit Chief  

KH: cwyk  

Enclosures  

c: Northeast Regional Office  
PAMS File: 2006-09-050  
Permit Number: