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: 032008-007  Project Number: 2008-01-005
159-0002

Owner: Lafarge North America

Owner's Address: 5100 E. Courtney Atherton Road, Sugar Creek, MO 65302

Installation Name: Lafarge - Sedalia Asphalt

Installation Address: 22600 Snow Road, Sedalia, MO 65302

Location Information: Pettis County, S23, T46N, R22W

Application for Authority to Construct was made for:

The installation of a new asphalt plant. Asphalt is produced through a Drum Mix Dryer. The asphalt plant has a maximum hourly design rate (MHDR) of 450 tons per hour (tph). Best Management Practices is used to control fugitive emissions from haul roads and storage piles. This review was 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.

MAR 11 2008
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 RSMo 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
   Lafarge - Sedalia Asphalt 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 Lafarge - Sedalia Asphalt's asphalt plant (159-0002) 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. The asphalt plant is permitted to operate under four (4) operating scenarios: Solitary, concurrent (same owner), concurrent (separate owners), and concurrent (same and separate owners) operations. The total daily ambient impact of PM$_{10}$ at this site shall include the combined impact of the asphalt plant and any ambient background concentration from installations or equipment located on the same site as the asphalt plant.
   C. To demonstrate compliance during concurrent operations, the operator(s) shall maintain a daily record of material processed. Attachment A, or equivalent forms, shall be used for this purpose during concurrent (same owner) operations. Attachment B, or equivalent forms, shall be used for this purpose during concurrent (separate owners) and concurrent (same and separate owners) operations.

3. Annual Emission Limit of PM$_{10}$
   A. The operator(s) shall ensure that Lafarge - Sedalia Asphalt's asphalt plant emits less than 15 tons of PM$_{10}$ into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operator(s) shall maintain a monthly record of material processed and PM$_{10}$. Attachment C, Monthly PM$_{10}$ Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

4. Moisture Content Testing of Storage Piles Requirement
   A. The moisture content of the stockpiled rock will reduce particulate emissions. Lafarge - Sedalia Asphalt 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 kept onsite and be made available to Department of Natural Resource personnel upon request.
   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.%, Lafarge - Sedalia Asphalt shall apply for a new construction permit to account for the revised information.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

5. Baghouse(s) Control System Requirements
   A. Lafarge - Sedalia Asphalt shall install and operate baghouse(s) to restrict the emission of particulate matter from the drum dryer. The baghouse(s) must be used whenever the drum dryer is in operation.
   B. The Lafarge - Sedalia Asphalt 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.

   A. Lafarge - Sedalia Asphalt shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for all equipment applicable to NSPS Subpart "I". Lafarge - Sedalia Asphalt shall contact the Enforcement section to obtain all requirements for testing, and the plan must be submitted to the Enforcement section at least 30 days prior to the proposed test date.
   B. Testing must be performed no later than 60 days after achieving the maximum production rate of the process, and in any case no later than 180 days after initial startup. Testing shall be performed at no less than 90% of the maximum production rate. The performance test results shall be submitted to the Enforcement section no later than 30 days after completion of any required testing.

7. Restriction on the Use of Diesel Engines
   Lafarge – Sedalia Asphalt shall power its equipment using electrical power and not diesel engines/generators. If the installation decides, in the future, to use diesel engines/generators, a new permit review will be required.

8. Restriction on Minimum Distance to Nearest Property Boundary
   The primary emission point of the asphalt plant, which is the stack of the drum mix dryer, shall be located at least 278 feet from the nearest property boundary whenever it is operating at this site.

9. 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.

10. Reporting Requirement
    The operator(s) shall report to the Air Pollution Control Program 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.
TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

Lafarge North America proposes to install an asphalt plant at its site in Pettis County (S23, T46N, R22W) to replace an old asphalt plant that has been operating at the site (Permit 0989-001). Hot Mix Asphalt (HMA) is composed of non-metallic aggregate, sand, mineral filler and other materials with liquid asphaltic cement. These materials are mixed and heated/dried in the drum dryer. Processed HMA is delivered as sellable product. 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 Pettis County, an attainment area for all criteria air pollutants.

Table 1. Other Permits Issued for Site 159-0002

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
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<tbody>
<tr>
<td>1091-001</td>
<td>10/22/1991</td>
<td>Construction of rock-crushing equipment</td>
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<tr>
<td>0197-025</td>
<td>1/31/1997</td>
<td>Addition of equipment and increasing production</td>
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<tr>
<td>0197-025A</td>
<td>1/20/1999</td>
<td>Installation of crusher</td>
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<tr>
<td>102000-018</td>
<td>10/17/2000</td>
<td>Temporary crusher</td>
</tr>
<tr>
<td>012001-026</td>
<td>1/30/2001</td>
<td>Installation of rock-crushing plant</td>
</tr>
<tr>
<td>102000-018</td>
<td>1/31/2000</td>
<td>Substitute Wash Plant</td>
</tr>
<tr>
<td>072001-013</td>
<td>7/13/2001</td>
<td>Temporary permit for crusher and conveyor</td>
</tr>
</tbody>
</table>

Many permits have been issued in the past for other plants to operate at the site. However, the plants have been removed.

The asphalt plant is permitted to operate under the following four (4) scenarios.

- Solitary Operations: Operations when the stationary asphalt plant is the only plant located at the site.
- Concurrent (Same Owner) Operations: Operations when the stationary asphalt plant is located at this site at the same time as other plants owned by Lafarge North America, Inc.
- Concurrent (Separate Owner) Operations: Operations when the stationary asphalt plant is located at this site at the same time as plants owned by other companies.
- Concurrent (Same and Separate Owners): Operations when the stationary asphalt plant is located at this site at the same time as plants owned by Lafarge North America, Inc. and plants owned by other companies.

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutants of concern are PM$_{10}$, SO$_x$, CO, and NO$_x$. The potential emissions were 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”. The installation has decided to limit its annual PM$_{10}$ emissions to de minimis level of 15.0 tons so it would not have to perform an increment modeling analysis at the time of permitting. By holding PM$_{10}$ to its de minimis level, emissions of other criteria pollutants and HAPs will be held at their respective de minimis levels. Based on the conditioned potential, the operation is considered a de minimis source under 10 CSR 10-6.060 section (5).
The drum dryer and the asphalt heater will be the only combustion sources at the installation.

Table 2: Emissions Summary (tons per year)

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</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>187.27</td>
<td>&lt;15.00</td>
<td>0.0950</td>
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<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>108.42</td>
<td>8.68</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>108.96</td>
<td>8.73</td>
<td>N/A</td>
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<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>63.08</td>
<td>5.05</td>
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</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>256.37</td>
<td>20.53</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>17.15</td>
<td>1.37</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: N/A = Not Applicable
*Conditioned potential based on limit in permit conditions. Other pollutants proportionately reduced.

**AMBIENT AIR QUALITY IMPACT ANALYSIS**

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this operation. The ambient impact was evaluated at a distance of 278 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.

To ensure compliance with NAAQS, the following record keeping procedures shall be used.

- **Solitary Operations**: The stationary asphalt plant is expected to emit 111.18 µg/m$^3$ of PM$_{10}$ at the nearest property boundary if operating twenty-four (24) hours. Since this ambient impact is less than the NAAQS, no record keeping is required for this operating scenario.
- **Concurrent (Same Owner) Operations**: The stationary asphalt plant shall track its own daily PM$_{10}$ ambient impact and the daily PM$_{10}$ ambient impact of all other plants at the site to ensure that NAAQS is not exceeded. Attachment A, or equivalent forms, shall be used for this purpose.
- **Concurrent (Separate Owners) Operations**: The stationary asphalt plant is permitted to emit 90 µg/m$^3$ of PM$_{10}$ at the nearest property boundary. The stationary asphalt plant shall track its own daily PM$_{10}$ ambient impact to ensure that it does not exceed 90 µg/m$^3$. The remaining balance of 40 µg/m$^3$ are reserved for use by plants owned by other companies.
- **Concurrent (Same and Separate Owners) Operations**: All plants owned by LaFarge North America, Inc. are permitted to emit a combined 90 µg/m$^3$ of PM$_{10}$ at the nearest property boundary. The stationary asphalt plant shall track its own daily PM$_{10}$ ambient impact and the daily PM$_{10}$ ambient impact of all other plants owned by LaFarge North America, Inc. to ensure that the combined daily PM$_{10}$ ambient impact does not exceed 90 µg/m$^3$. The remaining balance of 40 µg/m$^3$ are reserved for use by plants owned by other companies.
Screening tools were used to develop an ambient impact factor for each operating scenario and they are incorporated into Attachments A and B to be used to ensure NAAQS compliance.

### 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>Modeled Impact (µg/m$^3$)</th>
<th>*Asphalt Heater Impact (µg/m$^3$)</th>
<th>**Background (µg/m$^3$)</th>
<th>NAAQS (µg/m$^3$)</th>
<th>Daily Production Limit (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solitary</td>
<td>0.0100</td>
<td>107.67</td>
<td>3.50</td>
<td>20.00</td>
<td>150.00</td>
<td>10,800</td>
</tr>
<tr>
<td>2. Concurrent (Same Owner)</td>
<td>0.0100</td>
<td>***</td>
<td>3.50</td>
<td>20.00</td>
<td>150.00</td>
<td>***</td>
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<tr>
<td>3. Concurrent (Separate Owners)</td>
<td>0.0094</td>
<td>86.50</td>
<td>3.50</td>
<td>60.00</td>
<td>150.00</td>
<td>9,158</td>
</tr>
<tr>
<td>4. Concurrent (Same and Separate Owners)</td>
<td>0.0094</td>
<td>***</td>
<td>3.50</td>
<td>60.00</td>
<td>150.00</td>
<td>***</td>
</tr>
</tbody>
</table>

*Asphalt heater impact (µg/m$^3$) is from the twenty-four (24) hour operation of the asphalt heater.

** Background PM$_{10}$ level of 20.00 µg/m$^3$ from haul roads and stockpiles and 40.00 µg/m$^3$ from the operation of plants owned by other companies.

*** The operator(s) must balance production among concurrently operating plants, with the ambient impacts for each, such that NAAQS is not exceeded. Ambient impacts from other plants owned by Lafarge North America can be obtained from the operators of these plants.

### 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 within 30 days of equipment startup.
- 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
- 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

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**PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Lafarge North America 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.
- Kansas City Regional Office Site Survey.
- Best Management Practices
Attachment A: Daily Ambient PM\textsubscript{10} Impact Tracking Record
Lafarge - Sedalia Asphalt, 159-0002 – Asphalt Plant
For Use During Concurrent (Same Owner) Operations

<table>
<thead>
<tr>
<th>Date</th>
<th>Lafarge - Sedalia Asphalt 159-0002 Project # 2008-01-005</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m\textsuperscript{3}ton)</th>
<th>\textsuperscript{1}Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3})</th>
<th>\textsuperscript{2}Asphalt Heater Impact (µg/m\textsuperscript{3})</th>
<th>\textsuperscript{3}Total Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3})</th>
<th>\textsuperscript{4}Total Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3})</th>
<th>\textsuperscript{5}Background PM\textsubscript{10} Level (µg/m\textsuperscript{3})</th>
<th>\textsuperscript{6}TOTAL PM\textsubscript{10} Level (µg/m\textsuperscript{3})</th>
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<td>Example</td>
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<td></td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.00</td>
</tr>
</tbody>
</table>

Note 1: The Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3}) for the stationary asphalt plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor. This is the ambient impact without the operation of the asphalt heater.

Note 2: The Asphalt Heater Impact (µg/m\textsuperscript{3}) is from the twenty-four (24) hour operation of the asphalt heater.

Note 3: The Total Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3}) is the sum of the The Daily PM\textsubscript{10} Impact (µg/m3) and The Asphalt Heater Impact (µg/m3).

Note 4: The Total Daily PM\textsubscript{10} Impact (µg/m\textsuperscript{3}) of other plants owned by Lafarge North America, Inc. can be obtained from the operators of these plants.

Note 5: Background PM\textsubscript{10} Level (µg/m\textsuperscript{3}) is from Haul Roads and Stockpiles.

Note 6: The TOTAL PM\textsubscript{10} Level (µg/m\textsuperscript{3}) is calculated by summing the Total Daily PM\textsubscript{10} Ambient Impact(s) and the Background PM\textsubscript{10} Level. A TOTAL PM\textsubscript{10} Level of less than 150 µg/m\textsuperscript{3} in any 24-hour period indicates compliance.
Attachment B: Daily Ambient PM$_{10}$ Impact Tracking Record
Lafarge - Sedalia Asphalt, 159-0002 – Asphalt Plant
For Use During Concurrent (Separate Owners) Operations And Concurrent (Same and Separate Owners) Operations

<table>
<thead>
<tr>
<th>Date</th>
<th>Lafarge - Sedalia Asphalt 159-0002 Project # 2008-01-005</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>$^1$Daily PM$_{10}$ Impact (µg/m$^3$)</th>
<th>$^2$Asphalt Heater Impact (µg/m$^3$)</th>
<th>$^3$Total Daily PM$_{10}$ Impact (µg/m$^3$)</th>
<th>$^4$Total Daily PM$_{10}$ Impact (µg/m$^3$)</th>
<th>$^5$Total Daily PM$_{10}$ Impact (µg/m$^3$)</th>
<th>$^6$Background PM$_{10}$ Level (µg/m$^3$)</th>
<th>$^7$TOTAL PM$_{10}$ Level (µg/m$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>1,500</td>
<td>0.0094</td>
<td>14.10</td>
<td>3.50</td>
<td>17.60</td>
<td>20.00</td>
<td>25.00</td>
<td>60.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The Daily PM$_{10}$ Impact (µg/m$^3$) for the stationary asphalt plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor. This is the ambient impact without the operation of the asphalt heater.

Note 2: The Asphalt Heater Impact (µg/m$^3$) is from the twenty-four (24) hour operation of the asphalt heater.

Note 3: The Total Daily PM$_{10}$ Impact (µg/m$^3$) is the sum of the The Daily PM$_{10}$ Impact (µg/m$^3$) and The Asphalt Heater Impact (µg/m$^3$).

Note 4: The Total Daily PM$_{10}$ Impact (µg/m$^3$) of other plants owned by Lafarge North America, Inc. can be obtained from the operators of these plants. A value of zero (0) should be used during concurrent (separate owner) operations.

Note 5: Background PM$_{10}$ Level (µg/m$^3$) is from Haul Roads and Stockpiles and operations of plants owned by other companies.

Note 6: The TOTAL PM$_{10}$ Level (µg/m$^3$) is calculated by summing the Total Daily PM$_{10}$ Ambient Impact(s) 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 C: Monthly PM$_{10}$ Emissions Tracking Record
Lafarge - Sedalia Asphalt, 159-0002 – Asphalt Plant

**Project Number:** 2008-01-005  
**County, CSTR:** Pettis County (S23, T46N, R22W)  
**Primary Unit Size:** 450 tph  
**Distance to Nearest Property Boundary:** 278 feet

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>$^1$Monthly PM$_{10}$ Emissions (lbs)</th>
<th>$^2$Monthly PM$_{10}$ Emissions (tons)</th>
<th>$^3$12-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>44,000</td>
<td>0.0950</td>
<td>4180</td>
<td>2.09</td>
<td>2.09</td>
</tr>
</tbody>
</table>

Note 1: The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).

Note 2: The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.

Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 15 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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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. Josh Martin  
Manager of Environment  
Lafarge North America  
15100 E. Courtney Atherton Road  
Sugar Creek MO  65302  

RE:      New Source Review Permit - Project Number: 2008-01-005  

Dear Mr. Martin:  

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 2008-01-005, is necessary for continued compliance.  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 regarding this permit, 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 (573) 751-4817.  Thank you for your attention to this matter.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

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

KBH: cwyl  

Enclosures

c:       Kansas City Regional Office  
PAMS File: 2008-01-005  
Permit Number: