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: 072020-001  Project Number: 2020-04-014
Installation ID: PORT-0813

Parent Company: Magruder Paving, LLC
Parent Company Address: 255 Watson Road, Troy, MO 63379

Installation Name: Magruder Paving, LLC
Installation Address: 385 N. Main Street, Old Monroe, MO 63369
Location Information: Lincoln County (Landgrant 00524)

Application for Authority to Construct was made for:
The installation of a new portable drum-mix asphalt plant, rated at 400 tons per hour.
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 are applicable to this permit.

______________________________
Director or Designee
Department of Natural Resources

July 2, 2020
Effective Date
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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department’s Air Pollution Control Program of the anticipated date of startup of this (these) air contaminant sources(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department’s regional office responsible for the area within which you are located within 15 days after the actual startup of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department’s 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 sources(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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/
GENERAL 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 to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E). “Conditions required by permitting authority.”

1. Equipment Identification Requirement
   Magruder Paving, LLC 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.

2. Relocation of Portable Rock Crushing Plant
   A. Magruder Paving, LLC shall not be operated at any location longer than 24 consecutive months, except if the Site Specific Special Conditions of this portable plant, PORT-0813, contain a requirement limiting the portable plant at the site specific location to 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 asphalt plant.
      1) If the portable asphalt 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 asphalt plant is moving to a new site or if circumstances at the previously permitted site have changed, 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. Record Keeping and Reporting Requirements
   A. Magruder Paving, LLC shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources’ personnel upon request.

   B. Magruder Paving, LLC shall report to the Air Pollution Control Program’s Compliance/Enforcement Section by mail at P.O. Box 176, Jefferson City, MO 65102 or by e-mail at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any exceedances of the limitations imposed by this permit.
SITE SPECIFIC 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 to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E). “Conditions required by permitting authority.”

PORT ID Number: PORT-0813
Site ID Number: 113-0072
Site Address: 385 N. Main Street, Old Monroe, MO 63369
Site County: Lincoln (Landgrant 00524)

1. Annual Emission Limit
   A. Magruder Paving, LLC shall emit less than 15.0 tons of PM$_{10}$ in any consecutive 12-month period from PORT-0813 and its associated haul roads and storage piles while operating at this site (see Table 1). All actual emissions, including all startup, shutdown, and malfunction (SSM) emissions, shall be included in monthly compliance demonstration calculations.

   B. Magruder Paving, LLC shall demonstrate compliance with Special Condition 1.A using Attachment A or an equivalent form that has been approved by the Air Pollution Control Program.

2. Best Management Practices Requirement
   Magruder Paving, LLC shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing BMPs, as defined in Attachment B.

3. Moisture Content Testing Requirement
   A. Magruder Paving, LLC shall verify that the moisture content of the processed rock is greater than or equal to 1.5% by weight.

   B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566, or another method approved by the Air Pollution Control Program.

   C. The initial test shall be conducted no later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test, during the months of July or August.

   D. The test samples shall be taken from rock that has been processed by the plant or from each source of aggregate (e.g. quarry).
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

E. The written analytical report shall include the raw data and moisture content of each sample, the test date, and the original signature of the individual performing the test. The report shall be filed on-site or at the Magruder Paving, LLC main office within 30 days of completion of the required test.

F. If the moisture content of either of the two tests is less than the moisture content in Special Condition 3.A, another test may be performed within 15 days of the noncompliant test. If the results of that test are less than the moisture content in Special Condition 3.A, Magruder Paving, LLC shall either:
   1) Apply for a new permit to account for the revised information; or
   2) Submit a plan for the installation of wet spray devices to the Air Pollution Control Program’s Compliance/Enforcement Section within 10 days of the second noncompliant test. Plans may be to P.O. Box 176, Jefferson City, MO 65102 or by email to aircompliancereporting@dnr.mo.gov. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.

G. In lieu of testing, Magruder Paving, LLC may obtain test results that demonstrate compliance with the moisture content in Special Condition 3.A from the supplier of the aggregate.

4. Control Device Requirement – Baghouse
   A. Magruder Paving, LLC shall control emissions from the drum dryer (EP-4) using a baghouse, as specified in the permit application.

   B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. This gauge or meter shall be located such that Department of Natural Resources’ employees may easily observe them.

   C. Magruder Paving, LLC shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours when the plant is operating. The pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty, which shall be kept on site.

   D. Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (e.g. temperature limits, acidic/alkali resistance, abrasion resistance).
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

E. Magruder Paving, LLC shall maintain an operating and maintenance log for the baghouse, which shall include the following:
   1) Incidents of malfunction with impact on emissions, date and duration of event, probable cause, and corrective actions
   2) Maintenance activities with inspection schedule, repair actions, replacements, etc.

5. Fuel Requirement
A. Magruder Paving, LLC shall burn exclusively fuel oil with a sulfur content less than or equal to 0.5% by weight in the drum dryer (EP-4).
B. Magruder Paving, LLC shall burn exclusively fuel oil with a sulfur content less than or equal to 0.0015% by weight in the asphalt oil heater (EP-5).
C. Magruder Paving, LLC shall demonstrate compliance with Special Condition 5.A by obtaining records of the fuel’s sulfur content from the vendor for each shipment of fuel received or by testing each shipment of fuel for the sulfur content in accordance with the method described in 10 CSR 10-6.040 Reference Methods

6. Record Keeping and Reporting Requirements
A. Magruder Paving, LLC 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.
B. Magruder Paving, LLC shall report to the Air Pollution Control Program’s Compliance/Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 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: 2020-04-014
Installation ID Number: PORT-0813
Permit Number: 072020-001

Installation Address:
Magruder Paving, LLC:
385 N. Main Street
Old Monroe, MO 63369
Lincoln County (Landgrant 00524)

Parent Company:
Magruder Paving, LLC
255 Watson Road
Troy, MO 63379

PROJECT DESCRIPTION

Magruder Paving, LLC is constructing a portable CMI Model PTD-400 drum-mix asphalt plant (PORT-0813) at its initial site. PORT-0813 has previously been permitted in Nebraska and Oklahoma, but never before in Missouri. The plant is rated at 400 tons per hour; however, it was stack tested in June of 2004 while operating at an average rate of 354 tons per hour. Therefore, using the allowed 110% of the stack tested operating rate yields an effective maximum design rate of 389 tons per hour. Approximately 40% of the aggregate processed by the plant will be replaced by RAP. PORT-0813 will include a 120 MMBtu/hr drum dryer burner and a 1.84 MMBtu/hr asphalt oil heater. The plant will be powered by a 1,150 horsepower diesel engine and a 100 horsepower diesel engine, both of which meet the definition of “nonroad” as defined by 40 CFR 89.2 (1)(i); therefore, emissions from these units were not included in the project emissions. A complete list of plant equipment is provided in Table 1.

The moisture content of the processed rock will be tested to ensure a value of at least 1.5% is maintained. Particulate emissions from PORT-0813 will be controlled by a baghouse. Magruder Paving, LLC will be using one of the methods described in Attachment B, Best Management Practices, to control emissions from haul roads and vehicular activity areas.

TABLES

Table 1 provides a list of individual equipment that constitutes PORT-0813. Also included are the emission points that will be present at each operating site but are not specifically a part of the plant.
Table 1: Equipment Summary

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Description</th>
<th>Maximum Design Rate</th>
<th>Control Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-1</td>
<td>Raw Material Hauling</td>
<td>389 tons/hr</td>
<td>BMPs</td>
</tr>
<tr>
<td>EP-2</td>
<td>Storage Piles</td>
<td>389 tons/hr</td>
<td>BMPs</td>
</tr>
<tr>
<td>EP-3</td>
<td>Cold Aggregate Transfer</td>
<td>389 tons/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-4</td>
<td>Drum Dryer</td>
<td>389 tons/hr</td>
<td>Baghouse</td>
</tr>
<tr>
<td>EP-5</td>
<td>Asphalt Oil Heater</td>
<td>1.84 MMBtu/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-6</td>
<td>Hot Asphalt Silo Filling</td>
<td>389 tons/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-7</td>
<td>Hot Asphalt Loadout</td>
<td>389 tons/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-8</td>
<td>Customer Hauling</td>
<td>389 tons/hr</td>
<td>BMPs</td>
</tr>
<tr>
<td>EP-9A</td>
<td>Used Oil Tank</td>
<td>20,000 gal</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-9B</td>
<td>Diesel Tank</td>
<td>9,600 gal</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-9C</td>
<td>Asphaltic Cement Tank #1</td>
<td>30,000 gal</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-9D</td>
<td>Asphaltic Cement Tank #2</td>
<td>30,000 gal</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-10A</td>
<td>Diesel Engine #1</td>
<td>6.90 MMBtu/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-10B</td>
<td>Diesel Engine #2</td>
<td>1.38 MMBtu/hr</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable

Table 2 summarizes the emissions of this project. PORT-0813 has not previously been permitted in Missouri; therefore, existing actual emissions are unknown. Potential emissions of process equipment exclude emissions from haul roads and storage piles, which are site specific. Potential emissions of the project represent the emissions of all equipment and activities, assuming continuous operation (8,760 hours per year). Conditioned potential emissions account for a voluntary PM$_{10}$ de minimis limit.

Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>De Minimis Level/SMAL</th>
<th>Existing Actual Emissions</th>
<th>Potential Emissions of Process Equipment$^a$</th>
<th>Potential Emissions of the Project$^b$</th>
<th>Conditioned Potential Emissions$^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>N/D</td>
<td>124.48</td>
<td>172.46</td>
<td>30.86</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/D</td>
<td>65.63</td>
<td>83.83</td>
<td>&lt;15.0</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>N/D</td>
<td>44.36</td>
<td>47.92</td>
<td>8.57</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/D</td>
<td>135.01</td>
<td>135.01</td>
<td>24.16</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/D</td>
<td>170.37</td>
<td>170.37</td>
<td>30.49</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/D</td>
<td>102.73</td>
<td>102.73</td>
<td>18.38</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/D</td>
<td>29.72</td>
<td>29.72</td>
<td>5.32</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>10.0/2.0</td>
<td>N/D</td>
<td>5.58</td>
<td>5.58</td>
<td>1.00</td>
</tr>
<tr>
<td>2-methylnaphthalene$^d$</td>
<td>10.0/0.01</td>
<td>N/D</td>
<td>0.31</td>
<td>0.31</td>
<td>0.056</td>
</tr>
<tr>
<td>Lead Compounds</td>
<td>10.0/0.01</td>
<td>N/D</td>
<td>0.026</td>
<td>0.026</td>
<td>0.0046</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>N/D</td>
<td>17.78</td>
<td>17.78</td>
<td>3.18</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined

$^a$ Excludes haul road and storage pile emissions

$^b$ Includes site specific haul road and storage pile emissions

$^c$ Conditioned potential emissions account for a voluntary PM$_{10}$ de minimis limit

$^d$ 2-methylnaphthalene (C$_{11}$H$_{10}$) is a member of the Polycyclic Organic Matter (POM) HAP group
Table 3 summarizes the ambient air quality impact analysis, which was performed for any pollutant with a potential to emit greater than its respective SMAL. The maximum modeled impact is the impact of each pollutant when the plant is operating continuously.

Table 3: Ambient Air Quality Impact Analysis

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>RAL (µg/m³)a</th>
<th>Averaging Time</th>
<th>Maximum Modeled Impact (µg/m³)b</th>
<th>Limited Impact (µg/m³)c</th>
</tr>
</thead>
<tbody>
<tr>
<td>C₁₁H₁₀</td>
<td>23</td>
<td>24-hour</td>
<td>1.50</td>
<td>N/A</td>
</tr>
<tr>
<td>C₁₁H₁₀</td>
<td>2.3</td>
<td>Annual</td>
<td>0.25</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable

a Risk Assessment Level

b Modeled impact at maximum capacity with controls

c Limit based on compliance with RAL

The following equipment was modeled using the AERSCREEN screen modeling software. Table 4 provides a list of stack characteristics that were entered into the modeling software.

Table 4: AERSCREEN Input Parameters

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Stack Height (m)</th>
<th>Stack Inside Diameter (m)</th>
<th>Stack Gas Exit Velocity (m/s)</th>
<th>Stack Gas Exit Temperature (K)</th>
<th>Dispersion Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Dryer (EP-4)</td>
<td>6.492</td>
<td>0.975</td>
<td>42.183</td>
<td>388.706</td>
<td>Rural</td>
</tr>
</tbody>
</table>

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 drum mix asphalt plant were calculated using emission factors from AP-42, Section 11.1 Hot Mix Asphalt Plants (April 2004). Sulfur oxide (SOₓ) emissions were calculated using the SO₂ and SO₃ emission factors from AP-42, Section 1.3 Fuel Oil Combustion (September 1998) and assuming half of the sulfur up to 0.1 pound per ton of product is absorbed into the product. The asphalt plant is controlled by a baghouse, so the fabric filter controlled emission factor was used to calculate PM, PM₁₀, and PM₂.₅ emissions. Emissions from plant load-out were calculated using predictive equations found in AP-42 Table 11.1-14. Default values were used for asphalt volatility and mix temperature. Emissions from the asphalt heater were calculated using emission factors from AP-42, Section 1.3. Emissions from aggregate handling 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 inherent moisture content of the crushed rock is greater than 1.5% by weight.
PM, PM$_{10}$, and PM$_{2.5}$ emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42, Section 13.2.2 *Unpaved Roads* (November 2006). A 90% control efficiency for PM and PM$_{10}$ and a 74% control efficiency for PM$_{2.5}$ are applied to the emission calculations for the use of BMPs. PM, PM$_{10}$, and PM$_{2.5}$ emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42, Section 13.2.4 *Aggregate Handling and Storage Piles* (November 2006). The moisture content of the aggregate was assumed to be 1.5% by weight. PM, PM$_{10}$, and PM$_{2.5}$ 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*.

**PERMIT RULE APPLICABILITY**

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential PM emissions are above the de minimis level, but below the major source level. Potential PM$_{10}$ emissions (and subsequently all other pollutants) are conditioned below the de minimis level.

**APPLICABLE REQUIREMENTS**

Magruder Paving, LLC 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**

- *Restriction of Emission of Odors*, 10 CSR 10-6.165
- *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

**SPECIFIC REQUIREMENTS**

- *New Source Performance Regulations*, 10 CSR 10-6.070
  - *Standards of Performance for Hot Mix Asphalt Facilities*, 40 CFR 60 Subpart I
• *Control of Sulfur Dioxide Emissions, 10 CSR 10-6.261*

**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*, it is recommended that this permit be granted with special conditions.

**PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

• The Application for Authority to Construct form, dated April 1, 2020, received April 6, 2020, designating Magruder Paving, LLC as the owner and operator of the installation.
This sheet covers the period from ________________ to ________________ (Copy as needed)

<table>
<thead>
<tr>
<th>Month</th>
<th>Production (tons)</th>
<th>Emission Factor (lbs/ton)</th>
<th>Monthly Emissions¹ (lbs)</th>
<th>SSM Emissions² (lbs)</th>
<th>Total Monthly Emissions³ (tons)</th>
<th>12-Month Rolling Total Emissions⁴ (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>50,000</td>
<td>0.0492</td>
<td>2,460</td>
<td>N/A</td>
<td>1.230</td>
<td>14.76</td>
</tr>
</tbody>
</table>

¹ Multiply the monthly production by the emission factor.
² Enter the monthly startup, shutdown, and malfunction (SSM) emissions.
³ Add the monthly emissions (lbs) to the SSM emissions and divide by 2,000.
⁴ Add the total monthly emissions (tons) to the sum of the total monthly emissions from the previous eleven months. A total of less than 15.0 tons of PM₁₀ per consecutive 12 months is necessary for compliance with Special Condition 1.
Attachment B: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the plant is operating.

1. Pavement
   A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions while the plant is operating.
   B. Maintenance and 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 shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Application of Chemical Dust Suppressants
   A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
   B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer’s recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator 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 shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources’ personnel upon request.

3. Application of Water – Documented Daily
   A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
   B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
   C. 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.
   D. The operator shall record the date, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rational for not watering (e.g. freezing conditions or not operating).
   E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources’ personnel upon request.
APPENDIX A
Abbreviations and Acronyms

% ............ percent
°F ............ degrees Fahrenheit
acfm .......... actual cubic feet per minute
BACT .......... Best Available Control Technology
BMPs .......... Best Management Practices
Btu ............ British thermal unit
CAM .......... Compliance Assurance Monitoring
CAS .......... Chemical Abstracts Service
CEMS .......... Continuous Emission Monitor System
CFR .......... Code of Federal Regulations
CO .......... carbon monoxide
CO₂ .......... carbon dioxide
CO₂e .......... carbon dioxide equivalent
COMS .......... Continuous Opacity Monitoring System
CSR .......... Code of State Regulations
dscf .......... dry standard cubic feet
EIQ .......... Emission Inventory Questionnaire
EP .......... Emission Point
EPA .......... Environmental Protection Agency
EU .......... Emission Unit
fps .......... feet per second
ft ............ feet
GACT .......... Generally Available Control Technology
GHG .......... Greenhouse Gas
gpm .......... gallons per minute
gr .......... grains
GWP .......... Global Warming Potential
HAP .......... Hazardous Air Pollutant
hr ............ hour
hp ............ horsepower
lb .......... pound
lbs/hr .......... pounds per hour
MACT .......... Maximum Achievable Control Technology
µg/m³ .......... micrograms per cubic meter
m/s .......... meters per second
Mgal .......... 1,000 gallons
MW .......... megawatt
MHDR .......... maximum hourly design rate

MMBtu .... Million British thermal units
MMCF ....... million cubic feet
MSDS ...... Material Safety Data Sheet
NAAQS .... National Ambient Air Quality Standards
NESHAPs .. National Emissions Standards for Hazardous Air Pollutants
NOₓ .......... nitrogen oxides
NSPS ........ New Source Performance Standards
NSR .......... New Source Review
PM .......... particulate matter
PM₂.₅ .......... particulate matter less than 2.5 microns in aerodynamic diameter
PM₁₀ .......... particulate matter less than 10 microns in aerodynamic diameter
ppm .......... parts per million
PSD .......... Prevention of Significant Deterioration
PTE .......... potential to emit
RACT .......... Reasonable Available Control Technology
RAL .......... Risk Assessment Level
SCC .......... Source Classification Code
scfm .......... standard cubic feet per minute
SDS .......... Safety Data Sheet
SIC .......... Standard Industrial Classification
SIP .......... State Implementation Plan
SMAL ....... Screening Model Action Levels
SOₓ .......... sulfur oxides
SO₂ .......... sulfur dioxide
SSM .......... startup, shutdown, & malfunction
tph .......... tons per hour
tpy .......... tons per year
VMT .......... vehicle miles traveled
VOC .......... Volatile Organic Compound
July 2, 2020

Matt Lindsay
General Manager
Magruder Paving, LLC
255 Watson Road
Troy, MO 63379

RE: New Source Review Permit - Project Number: 2020-04-014

Dear Matt Lindsay:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. 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. In addition, please note that Magruder Paving, LLC cannot operate with any other plants that have ambient impact limits based on the Air Pollution Control Program’s nomographs. Please refer to the permits of any plant that you are operating with to see if their respective permits contain an ambient impact limit. 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission,
whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please to contact the Air Pollution Control Program at 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:rsa

Enclosures

c: St. Louis Regional Office
PAMS File: 2020-04-14

Permit Number: 072020-001