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: 082020-010  Project Number: 2020-06-014
Installation Number: 093-0007

Parent Company: Specialty Granules LLC

Parent Company Address: 13424 Pennsylvania Avenue, Suite 303, Hagerstown, MD 21742

Installation Name: Specialty Granules LLC

Installation Address: 1 Hillcrest Drive, Annapolis, MO 63620

Location Information: Iron County, S22, T31N, R3E

Application for Authority to Construct was made for:
Additional equipment to further process undersized granule material from an existing mill section. 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
August 24, 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 start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department’s 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 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 source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit 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/
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.”

Specialty Granules LLC
Iron County, S22, T31N, R3E

1. Control Device Requirement-Baghouse
   A. Specialty Granules LLC shall control emissions from the emission units listed in Table 2 in the Project Description Section using baghouses as specified in the permit application. This excludes transfer points EP-42 and EP-63, as they are inherently controlled through submersion.
   
   B. The baghouses shall be operated and maintained in accordance with the manufacturer’s specifications.
   
   C. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources’ employees may easily observe them.
   
   D. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
   
   E. Specialty Granules LLC shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer’s performance warranty.
   
   F. Specialty Granules LLC shall maintain a copy of the baghouse manufacturer’s performance warranty on site.
   
   G. Specialty Granules LLC shall maintain an operating and maintenance log for the baghouses which shall include the following:
      1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
      2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

2. Record Keeping and Reporting Requirements
   A. Specialty Granules LLC shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
   
   B. Specialty Granules 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 email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2020-06-014
Installation ID Number: 093-0007
Permit Number: 082020-010

Installation Address:  
Specialty Granules LLC  
1 Hillcrest Drive  
Annapolis, MO 63620

Parent Company:  
Specialty Granules LLC  
13424 Pennsylvania Avenue, Suite 303  
Hagerstown, MD 21742

Iron County, S22, T31N, R3E

REVIEW SUMMARY

- Specialty Granules LLC has applied for authority to install an addition to further process undersized granule material from an existing mill section.

- The application was deemed complete on June 12, 2020.

- HAP emissions are not expected from the proposed equipment.


- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.

- Baghouses are being used to control the PM, PM$_{10}$, and PM$_{2.5}$ emissions from the equipment in this permit.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM, PM$_{10}$ and PM$_{2.5}$ are below de minimis levels due to the use of controls.

- This installation is located in Iron County, an attainment/unclassifiable area for all criteria pollutants.

- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
• No Operating Permit is required for this installation.
• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Specialty Granules LLC, is an existing manufacturer of roofing shingle granules and is located in Iron County. Specialty Granules LLC quarries rhyolite onsite and processes the aggregates through crushing and screening operations to form raw roofing granules. The granules are then processed in a coloring plant. The installation was originally classified as a major source for particulate matter less than ten microns in diameter (PM$_{10}$) for construction permits. However, the facility has since installed fabric filters that reduced the PM$_{10}$ emissions to minor source levels. The facility has been issued a Basic State Operating Permit under project number 2013-09-016 and renewed said permit in project number 2018-08-040, however Basic Operating Permits are no longer issued and the active Basic Operating Permit has been terminated as a result.

The following NSR permits have been issued to Specialty Granules LLC from the Air Pollution Control Program.

Table 1: NSR Permit History

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0680-006</td>
<td>Rotary rock dryer for the secondary crusher, 20 MMBtu/hr burner, two conveyors</td>
</tr>
<tr>
<td>0680-007</td>
<td>Four underground storage tanks</td>
</tr>
<tr>
<td>0680-008</td>
<td>Rock storage and conveyors</td>
</tr>
<tr>
<td>0680-009</td>
<td>Rock storage and conveyors</td>
</tr>
<tr>
<td>0680-010</td>
<td>Conveyor</td>
</tr>
<tr>
<td>0680-011</td>
<td>Hopper and conveyor</td>
</tr>
<tr>
<td>0680-012</td>
<td>Two 500 ton storage bins and conveyors</td>
</tr>
<tr>
<td>0680-013</td>
<td>One 1000 tons storage bin and conveyor</td>
</tr>
<tr>
<td>1187-005</td>
<td>Incinerator</td>
</tr>
<tr>
<td>1290-002</td>
<td>Modification to process</td>
</tr>
<tr>
<td>0792-034</td>
<td>Tertiary crusher, screens, elevators, conveyors and storage bins</td>
</tr>
<tr>
<td>0393-006</td>
<td>Conveyor and screens</td>
</tr>
<tr>
<td>0394-015</td>
<td>Conveyor and slurry tank</td>
</tr>
<tr>
<td>0395-016</td>
<td>Outside storage stockpile</td>
</tr>
<tr>
<td>0395-017</td>
<td>Two screens</td>
</tr>
<tr>
<td>0298-002A</td>
<td>Four conveyors, two elevators and two screens for the recovery system</td>
</tr>
<tr>
<td>122009-007</td>
<td>Replacement of preheater kilns in the coloring plant</td>
</tr>
<tr>
<td>122009-007A</td>
<td>Correction to the potential emissions calculations</td>
</tr>
<tr>
<td>012011-014</td>
<td>Four screens and four conveyors for the mill building</td>
</tr>
<tr>
<td>082011-004</td>
<td>A rock dryer, crusher, screen and associated material handling equipment</td>
</tr>
<tr>
<td>012012-012</td>
<td>New truck loadout facility at the existing roofing shingle granule manufacturing plant.</td>
</tr>
<tr>
<td>012012-012A</td>
<td>Design changes</td>
</tr>
<tr>
<td>052012-017</td>
<td>Eight new screens, eight new conveyors, two new bucket elevators and two new hoppers and the replacement of two existing conveyors</td>
</tr>
<tr>
<td>122018-003</td>
<td>Emission unit update</td>
</tr>
<tr>
<td>082019-003</td>
<td>Temporary material changes</td>
</tr>
</tbody>
</table>
PROJECT DESCRIPTION

Specialty Granules LLC is installing a new set of equipment to further process undersized granule material from the existing Mill section to generate a commercial product. This product will then be loaded to rail cars for transport; the oversize material will be routed to a storage pile. The new process involves several conveyors and transfer points throughout the process section. Most of the new process is fully enclosed and has several dust pick-up points routed to three baghouses to control emissions of PM, PM_{10}, and PM_{2.5} with a manufacturer specified control efficiency.

Undersized material exiting from the existing Mill Section is introduced into the new process from existing conveyor (BC-191) at a maximum rate of 200 tph. Material will be directed into the new process through a bucket elevator (BE-1). This undersized material will pass through a surge bin (SB-1) and to a classifier (AC-1) where the fines from the classifier will be collected by a baghouse (DC-1). Material that is not undersized will instead continue on to the slurry tank. The material is then processed through an oiling bin (OB-1) and an oiling screw (OS-1) where an oil substance is applied to control emissions. This material will then be transported via a bucket elevator (BE-2) and two conveyors (BC-1 and BC-2) to silos S-1 or S-2. From the silos, the granules will be routed via conveyors and bucket elevator BE-3 to a screen (SC-2) where the target size material will be go to the rail car loadout and the oversize material will be stored in a pile on the ground. Baghouses DC-1, DC-100 and DC-200 control particulate emissions from the various pickup points throughout the proposed process.

Haul truck traffic is not anticipated to be affected because the processed material will be loaded into rail cars. Additionally, this new process will not debottleneck any part of the existing process, but rather, is bottlenecked itself by EP-43 to 75 tph.

Emissions from EP-67 and EP-69 are assumed to be negligible, as the transfer points from DC-1 and DC-100 to the slurry tanks will be submerged in the slurry.

The emissions of this project are below de minimis levels only after the addition of controls and are above insignificance levels.

Table 2 Project Emission Point Summary:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Bottlenecked MHDR (tons)</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-41</td>
<td>Conveyor BC-191 to Bucket Elevator BE-1</td>
<td>200</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-42</td>
<td>Bucket Elevator BE-1 to Slurry Tank</td>
<td>125</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-43</td>
<td>Bucket Elevator BE-1 to Surge Bin SB-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-44</td>
<td>Surge Bin SB-1 to Way Feeder WF-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-45</td>
<td>Way Feeder WF-1 to Classifier AC-1</td>
<td>75</td>
<td>DC-100, DC-1</td>
</tr>
<tr>
<td>EP-46</td>
<td>Classifier AC-1 to Screen SC-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-47</td>
<td>Screen SC-1 to Oiling Bin OB-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-48</td>
<td>Oiling Bin OB-1 to Way Feeder WF-2</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-49</td>
<td>Way Feeder WF-2 to Oiling Screw OS-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-50</td>
<td>Oiling Screw OS-1 to Bucket Elevator BE-2</td>
<td>75</td>
<td>DC-100</td>
</tr>
</tbody>
</table>
EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition. Emissions were derived from calculating the total emissions resulting from all new and debottlenecked equipment.

Transfer Point Emissions
- PM, PM$_{10}$, and PM$_{2.5}$ emissions for all conveyance transfer points were determined using AP-42 Chapter 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing” (August 2004).
- For most emission points, Table 11.19.2-2 “Conveyor Transfer Point” emission factors were used for PM, PM$_{10}$, and PM$_{2.5}$.

Screening Emissions
- PM, PM$_{10}$, and PM$_{2.5}$ emissions for screening transfer points were determined using AP-42 Chapter 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing”.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Bottlenecked MHDR (tons)</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-51</td>
<td>Bucket Elevator BE-2 to Conveyor BC-1</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-52</td>
<td>Conveyor BC-1 to Conveyor BC-2</td>
<td>75</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-53</td>
<td>Conveyor BC-2 to Silo S-2</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-54</td>
<td>Silo S-2 to Conveyor BC-5</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-55</td>
<td>Conveyor BC-5 to Conveyor BC-6</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-56</td>
<td>Conveyor BC-6 to Bucket Elevator BE-3</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-57</td>
<td>Conveyor BC-2 to Silo S-1</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-58</td>
<td>Silo S-1 to Conveyor BC-7</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-59</td>
<td>Conveyor BC-7 to Bucket Elevator BE-3</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-60</td>
<td>Bucket Elevator BE-3 to Screen SC-2</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-61</td>
<td>Screen SC-2 to Conveyor BC-8</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-62</td>
<td>Conveyor BC-8 to Shuttle Belt SBC-1</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-63</td>
<td>Shuttle Belt SBC-1 to Rail Car Loadout</td>
<td>75</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-64</td>
<td>Screen SC-2 to Surge Bin SB-2</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-65</td>
<td>Surge Bin SB-2 to Conveyor BC-9</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-70</td>
<td>Waste Granule Bin to Conveyor BC-9</td>
<td>75</td>
<td>DC-200</td>
</tr>
<tr>
<td>EP-66</td>
<td>Conveyor BC-9 to Storage Pile</td>
<td>75</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-67</td>
<td>DC-1 to Slurry Tank</td>
<td>75</td>
<td>Submerged</td>
</tr>
<tr>
<td>EP-68</td>
<td>Screen SC-1 to Slurry Tank</td>
<td>0*</td>
<td>DC-100</td>
</tr>
<tr>
<td>EP-69</td>
<td>DC-100 to Slurry Tank</td>
<td>75</td>
<td>Submerged</td>
</tr>
<tr>
<td>EP-71</td>
<td>DC-200 to S-1</td>
<td>1.4 x 10$^{-4}$</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-72</td>
<td>DC-200 to S-2</td>
<td>1.4 x 10$^{-4}$</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-73</td>
<td>Dust Collector DC-1</td>
<td>16000 CFM</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-74</td>
<td>Dust Collector DC-100</td>
<td>16500 CFM</td>
<td>N/A</td>
</tr>
<tr>
<td>EP-75</td>
<td>Dust Collector DC-200</td>
<td>15800 CFM</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*aDue to the low emissions resulting from the transfer to the slurry tank (EP-68), it is assumed all material passes through EP-47 instead of EP-68.*
For Screening PM and PM$_{10}$ emission points, the Table 11.19.2-2 “Screening” emission factors were used.

For Screening PM$_{2.5}$ emissions, the Table 11.19.2-2 “Screening (controlled)” emission factor was used.

Classifier Emissions
- PM, PM$_{10}$, and PM$_{2.5}$ emissions for the classifier were determined using AP-42 Chapter 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing” (August 2004).
- Emission factors were derived from Table 11.19.2-4.

Storage Pile Emissions
- PM, PM$_{10}$, and PM$_{2.5}$ emissions for the transfer to the storage pile were determined using AP-42 Chapter 13.2.4 “Aggregate Handling and Storage Piles” (November 2006).
- These emissions were determined using the drop point equation.

Slurry Tank Emissions
- PM, PM$_{10}$, and PM$_{2.5}$ emissions from emission points transferring fines to the slurry tanks were assumed to be negligible, as the transfer points are submerged.

Dust Collector Emissions
- The control efficiency and emission factor for Dust Collector DC-1, DC-100, and DC-200 were determined using Donaldson Company information.
- PM, PM$_{10}$, and PM$_{2.5}$ emissions resulting from the dust collectors were determined to have an emission factor of 0.005 grains/scf.

The following table provides an emissions summary for this project. Existing potential emissions were taken from permit #122018-003. Existing actual emissions were taken from the installation’s 2019 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).
Table 3: Emissions Summary (tpy)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions (2019 EIQ)</th>
<th>Potential Emissions of the Project</th>
<th>New Installation Conditioned Potential ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>&lt;major</td>
<td>N/D</td>
<td>9.24</td>
<td>N/A</td>
</tr>
<tr>
<td>Total PM₁₀</td>
<td>15.0</td>
<td>148.42</td>
<td>30.63</td>
<td>9.13</td>
<td>N/A</td>
</tr>
<tr>
<td>²Non-fugitive PM₁₀</td>
<td>N/A</td>
<td>72.01</td>
<td>N/D</td>
<td>9.07</td>
<td>N/A</td>
</tr>
<tr>
<td>Total PM₂.₅</td>
<td>10.0</td>
<td>&lt;major</td>
<td>9.18</td>
<td>9.13</td>
<td>N/A</td>
</tr>
<tr>
<td>²Non-Fugitive PM₂.₅</td>
<td>N/A</td>
<td>&lt;major</td>
<td>N/D</td>
<td>9.07</td>
<td>N/A</td>
</tr>
<tr>
<td>SOₓ</td>
<td>40.0</td>
<td>2.46</td>
<td>0.13</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOₓ</td>
<td>40.0</td>
<td>83.91</td>
<td>21.70</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>6.85</td>
<td>1.15</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>76.38</td>
<td>4.34</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GHG (CO₂e)</td>
<td>N/A</td>
<td>&lt;100,000</td>
<td>N/D</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>0.50</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

¹The installation was issued a 100,000 tons per year CO₂e limit in permit #082011-004, which is still applicable. However, the facility does not have a new conditioned potential as a result of this permit.

²Because this facility is not a named source, only non-fugitive emissions are counted towards major source applicability.

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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 emissions of PM, PM₁₀ and PM₂.₅ are below de minimis levels due to the use of controls.

APPLICABLE REQUIREMENTS

Specialty Granules 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. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- Operating Permits, 10 CSR 10-6.065
- Start-Up, Shutdown, and Malfunction Conditions, 10 CSR 10-6.050
- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
• Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.

- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170
- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220
- Restriction of Emission of Odors, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS
• Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400

• New Source Performance Regulations, 10 CSR 10-6.070
  o Standards of Performance for Nonmetallic Mineral Processing Plants 40 CFR Part 60, Subpart OOO applies to the equipment,

• No MACT Regulations or Emission Standards for Hazardous Air Pollutants (NESHAP) apply to the permitted 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, 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 June 10, 2020, received June 12, 2020, designating Specialty Granules LLC as the owner and operator of the installation.
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
PM₁₀ .......... particulate matter less than 10 microns in aerodynamic diameter
PM₂.₅ .......... particulate matter less than 2.5 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
August 24, 2020

Travis Abernathy  
Environmental Coordinator  
Specialty Granules LLC  
1 Hillcrest Drive  
Annapolis, MO 63620

RE: New Source Review Permit - Project Number: 2020-06-014

Dear Travis Abernathy:

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, your new source review permit application and with your amended operating permit are necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

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 do not hesitate to contact Dakota Fox at the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:dfa

Enclosures

c: Southeast Regional Office
   PAMS File: 2020-06-014

Permit Number: 082020-010