May 05, 2017

Ms. Trinke Vaughan
EHS Leader
Owens Corning Mineral Wool, LLC
1983 South State Line Rd
Joplin, MO 64804

RE: New Source Review Permit Amendment - Permit Number: 052016-003B
   Public Project Number: 2017-03-052; Installation Number: 097-0176

Dear Ms. Vaughan:

Permit 052016-003 has been amended to allow more flexibility for material throughput limits on haul roads. This affects Special Condition 13. Previously the limits were in tons per day. Some limits equated to less than 1 or 2 full trucks per day. Those limits have been changed to a number of trucks per day. This is not expected to cause an exceedance of any 24-hour modeling standard. In order to maintain the modeling performed for annual standards, annual material limits have been added.

The permit has also been amended to allow some required paved road segments to be temporarily unpaved. This affects Special Condition 19. Initial production is expected to be at an amount less than the maximum level used in the compliant modeling runs, and production emissions would be lower. The temporarily unpaved segments will be controlled by water spray. Therefore, any increase in haul road emissions by being unpaved is not expected to cause an exceedance of a modeling standard during this time.

Owens Corning requested confidentiality for the shipping and receiving throughputs. Confidentiality was granted. This is the redacted public amendment. A confidential version was issued under project 2017-03-053.

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
Permits Section Chief

KBH:dlj

Enclosures

c: Southwest Regional Office
   PAMS File: 2017-03-052
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) and by the Missouri Rules listed in Title 10, Division 10 of the
Code of State Regulations (specifically 10 CSR 10-6.060). For specific details
regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required
by permitting authority.”

Owens Corning Mineral Wool, LLC
Jasper County, S11, T27N, R34W

1. Superseding Condition
The conditions of this permit supersede the following special conditions in permit
052016-003 issued by the Air Pollution Control Program.
   Special Condition 13.A. and 13.B.
   Special Condition 19.A.

13. Receiving and Shipping
   A. OCIS shall not exceed the limits in Table 1.

Table 1: Material Throughput Limits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Limit (tons per day)</th>
<th>Limit (trucks per day)</th>
<th>Limit (tons per consecutive 12-month period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck Receiving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared limit: Dolomite, limestone, shot bricks, slags, feldspar, trap rock, coke, anodes</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Shared limit: Resin, urea, ammonia, emulsified oil, silane, ammonium sulfate, silicone</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Shared limit: Lime, sodium bicarbonate, oxygen</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Shared limit: Bags, film, wrap</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Pallets</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Truck Shipping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared limit: Waste from stone, coke, anodes, shot, iron tap, pit, line fallout, product change</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waste (fly ash) from heat recovery system</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waste from saw kerf baghouse</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Process waste bunker located outside of mix</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

<table>
<thead>
<tr>
<th>Building, consisting of fibers and binder residue with process oil</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final products</td>
<td>N/A</td>
</tr>
<tr>
<td>Rail Receiving</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Shared limit: dolomite, limestone, shot bricks, slags, feldspar, trap rock, coke, and anodes

N/A = not applicable

B. OCIS shall keep daily records on site to demonstrate compliance with the throughput limits in Special Condition 13.A. Records shall include activity, daily throughput, and measurement method. Shipping receipts showing the material name, weight, and date are a valid method.

19. Haul Roads
A. 1) OCIS shall pave all haul roads except unpaved segments URHDEL1, URHDEL2, URHDEL3, and BUNKAREA as identified in the document, Section 8 Ambient Air Quality Impact Analysis (AAQIA) for the Owens Coming Insulating Systems, LLC (Owens Coming), dated March 3, 2016, with materials such as asphalt, concrete, or other materials subject to approval by the Air Pollution Control Program.

2) OCIS shall pave all haul roads except unpaved segments highlighted in yellow as indicated in Attachment A to this permit amendment, with materials such as asphalt, concrete, or other materials subject to approval by the Air Pollution Control Program. The segments indicated in Attachment A shall be paved by April 30, 2017, and afterwards are subject to the requirements of permit 052016-003 for paved haul roads.
8 roads at risk of being packed in time for start-up.
(At minimum they will be future growth.)

Figure 1
Owens Corning - Release Locations

Legend
- Point Sources
- Volume Sources
- Containers
- Bunker Piles
- Haul Roads
- Buildings
- Property Boundary
- Area Play Sources