Missouri State Implementation Plan Revision

Modification to the Attainment Demonstration for the 2008 Lead National Ambient Air Quality Standard

Buick/Viburnum Trend Lead Nonattainment Area

Public Hearing Date
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The Missouri Department of Natural Resources’ Air Pollution Control Program (Air Program) proposes to revise the 2013 Attainment Demonstration and associated 2013 Consent Judgment for the attainment of the 2008 Lead National Ambient Air Quality Standard (NAAQS) for the Buick/Viburnum Trend Lead Nonattainment Area. The purpose of this proposed State Implementation Plan (SIP) revision is to remove the requirement for a new stack that is not yet constructed at this lead nonattainment area’s secondary lead smelter. This stack is currently required by the SIP and 2013 Consent Judgment as Emission Point 100 (EP100). Reevaluation of the design demonstrates that that this new stack is no longer necessary since the building enclosure baghouse exhaust stream will now be routed to the main stack and the main stack shall continue to meet the required emission limitation.

On March 28, 2013, The Missouri Air Conservation Commission (MACC) adopted a SIP revision for the Buick/Viburnum Trend Lead Nonattainment Area to demonstrate attainment of the 2008 Lead NAAQS by the required compliance date. Among other requirements, compliance with this standard is based on ambient monitoring data with concentrations less than 0.15 micrograms per cubic meter (μg/m³) based on a 3-month rolling average. At the core of the 2013 Lead NAAQS SIP is the 2013 Consent Judgment, a binding agreement among The Doe Run Resources Corporation (Doe Run), the Buick Resource Recycling Facility, LLC (BRRF), the State of Missouri, and the Missouri Department of Natural Resources. This 2013 Consent Judgment details numerous lead emission control technology projects, work practices, and strategies used to demonstrate attainment of the 2008 Lead NAAQS, many of which have been completed. The SIP revision and associated information and documents, including the 2013 Consent Judgment, were submitted to the U.S. Environmental Protection Agency (EPA) in correspondence dated April 17, 2013 for review and approval.

In particular, the 2013 Consent Judgment requires that the BRRF facility enclose the refinery, blast furnace, reverberatory furnace, and dross plant building and install a baghouse to achieve negative pressure as further specified and on a schedule articulated in the judgment. The 2013 Consent Judgment further states that the facility shall install a new 65 meter stack for this exhaust stream and requires an emission limit of 0.7 pounds per hour for this new emission point (stack).

After further analysis to verify the need for the new stack (EP 100), BRRF has determined, and the Air Program concurs, that construction of EP100 is not necessary to achieve its required emission reductions and therefore no longer intends to construct a separate new emission point (i.e., a new stack) for this baghouse exhaust stream. Instead, this exhaust stream will be routed
to the existing main stack (EP 8). The BRRF facility shall continue to satisfy the requirement for the main stack emission limitation of 0.7 pounds per hour, even with the routing of this additional exhaust stream to the main stack. This change will result in no increase in, or impact on, emissions and will realize reduced capital costs since construction of the new stack is no longer required. Further, this modification does not impact remaining provisions such as implementation timelines or the requirement to conduct stack testing to demonstrate compliance with the 0.7 pounds per hour emission limit for the main stack. Therefore, the Air Program considers this modification to be administrative in nature and thus does not require additional modeling.

The 2013 Consent Judgment states that the judgment may be modified by written agreement among the parties. This proposed modification to the 2013 Consent Judgment removes the reference to the construction of a new stack in Paragraph 6.G. and removes the emission point and corresponding limit in Paragraph 8.G. The new Consent Judgment language, including proposed deletions and additions, is reflected as follows:

6.G. Enclose the refinery, blast furnace, reverberatory furnace, and dross plant buildings and install a baghouse with a minimum design of 300,000 acfm to achieve negative pressure consistent with the National Emission Standards for Hazardous Air Pollutants for Secondary Lead Smelting, 40 C.F.R. 63 Subpart X ("Secondary Lead MACT"), revised as of January 5, 2012. [Install a new stack with a minimum height of 65 meters for this exhaust stream.] Emissions will be routed to the main stack (EP8). Installation of the above controls must be completed and operation commenced by the earlier of (1) the date the facility must comply with the total enclosure standards in the Secondary Lead MACT, revised as of January 5, 2012, and any subsequent revision; or, (2) January 5, 2015.

8.G. Stack Emission Limits. BRRF will limit lead emissions to the atmosphere from certain stacks as set forth in the following table. BRRF is subject to the limit for [EP 100 and] EP 8 after the completion of the project in paragraph 6.G. The limits for EP 31C, EP 71, and EP 72 are effective consistent with the Secondary Lead MACT at 40 C.F.R. 63.546.
<table>
<thead>
<tr>
<th>Stack Name</th>
<th>Stack ID</th>
<th>Emission Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Stack</td>
<td>EP 8</td>
<td>0.7 lb/hour</td>
</tr>
<tr>
<td>[New Blast Furnace Process and Building Ventilation Baghouse]</td>
<td>[EP 100]</td>
<td>{0.7 lb/hour}</td>
</tr>
<tr>
<td>Drum Shredder Baghouse</td>
<td>EP 31C</td>
<td>0.025 lb/hour</td>
</tr>
<tr>
<td>Reverberatory Furnace Slag Tap Ventilation Baghouse</td>
<td>EP 71</td>
<td>0.08 lb/hour</td>
</tr>
<tr>
<td>North Refinery Baghouse</td>
<td>EP 72</td>
<td>0.006 lb/hour</td>
</tr>
</tbody>
</table>

Compliance will be determined via stack testing requirements and on a schedule that is consistent with the Secondary Lead MACT, revised as of January 5, 2012 except as follows. If any test does not show compliance with the limits herein, the facility will test the stack that tested above the limit and provide the stack test report or results within one hundred and twenty (120) days after the date of the test that failed to demonstrate compliance. If this subsequent test shows compliance, the prior exceedance will not be considered a violation of this Consent Judgment and compliance testing will return to a schedule consistent with the Secondary Lead MACT, revised as of January 5, 2012.

This proposed modification accurately reflects the projects and the emission points at the facility. Attached is the proposed First Modification to the Consent Judgment. The Air Program, the Missouri Attorney General's Office, Doe Run, and BRRF coordinated on the development of this proposed plan revision. If this proposed plan revision is adopted by the MACC, the parties have agreed to sign this modification to the 2013 Consent Judgment and we intend to submit this Consent Judgment modification and SIP revision to EPA as a supplement to the April 17, 2013 submittal mentioned previously.