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: 05 2013 - 006 Project Number: 2013-03-022
Installation Number: 109-0010

Parent Company: Silgan Containers Manufacturing Corporation
Parent Company Address: 21800 Oxnard Street, Suite 600, Woodland Hills, CA 91367
Installation Name: Silgan Containers Manufacturing Corporation
Installation Address: 305 W. North Street, Mt. Vernon, MO 65712
Location Information: Lawrence County, S30, T28N, R26W

Application for Authority to Construct was made for:
Application of a stripe of coating on the outside of the cans produced on lines #1, #2, and #3 to prevent rust. This review was conducted in accordance with Section (6), 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.

MAY 14 2013
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. 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 Department’s Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. 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 these air contaminant sources.

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 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 at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, 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) 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(12)(A)10. “Conditions required by permitting authority.”

Silgan Containers Manufacturing Corporation
Lawrence County, S30, T28N, R26W

1. HAP Emission Limitations
   A. Silgan Containers Manufacturing Corporation shall emit less than 10.0 tons individually, specifically Toluene (108-88-3), Xylene (1330-20-7), and Glycol Ethers (20-10-0), and 25.0 tons combined of HAPs in any consecutive 12-month period from the entire installation as listed in Table 2.

   B. Attachments A and B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.

2. Control Device Requirement – Triple Filter System
   A. Silgan Containers Manufacturing Corporation shall control emissions from the ES-3010, ES-3020, and ES-3030 Inside Stripe Applicators and ES-3015, ES-3025, and ES-3035 Outside Stripe Applicators using a Triple Filter System as specified in the permit application.

   B. The Triple Filter System shall be operated and maintained in accordance with the manufacturer’s specifications. The Triple Filter System 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 the Department of Natural Resources’ employees may easily observe them.

   C. Replacement filters for the Triple Filter System shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

D. Silgan Containers Manufacturing Corporation shall monitor and record the operating pressure drop across the Triple Filter System at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

E. Silgan Containers Manufacturing Corporation shall maintain a copy of the Triple Filter System manufacturer's performance warranty on site.

F. Silgan Containers Manufacturing Corporation shall maintain an operating and maintenance log for the Triple Filter System 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.

3. Operational Requirement – Ink/Solvent/Coating/Cleaning Solution Containers
   Silgan Containers Manufacturing Corporation shall keep inks, solvents, coatings, and cleaning solutions in sealed containers whenever the materials are not in use. Silgan Containers Manufacturing Corporation shall provide and maintain suitable, easily read, permanent markings on each ink, solvent, coating, and cleaning solution container used.

4. Operational Requirement – Intermediate/Part 70 Operating Permit
   The installation is required to apply for an Intermediate or Part 70 operating permit no later than 90 days after issuance of this permit.

5. Record Keeping and Reporting Requirements
   A. Silgan Containers Manufacturing Corporation 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. These records shall include MSDS for all materials used.

   B. Silgan Containers Manufacturing Corporation shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit indicates an exceedance of a limitation imposed by this permit.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2013-03-022
Installation ID Number: 109-0010
Permit Number:

Silgan Containers Manufacturing Corporation Complete: April 10, 2013
305 W. North Street
Mt. Vernon, MO 65712

Parent Company:
Silgan Containers Manufacturing Corporation
21800 Oxnard Street, Suite 600
Woodland Hills, CA 91367

Lawrence County, S30, T28N, R26W

REVIEW SUMMARY

- Silgan Containers Manufacturing Corporation has applied for authority to apply a stripe of coating on the outside of the cans produced on lines #1, #2, and #3 to prevent rust.

- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are Toluene (108-88-3), Xylene (1330-20-7), Glycol Ethers (50-10-0), Ethylbenzene (100-41-4), MIBK (108-10-1), and Formaldehyde (50-00-0).

- 40 CFR 60, Subpart WW - Standards of Performance for the Beverage Can Surface Coating Industry does not apply to the installation. This regulation applies to two-piece steel or aluminum beverage containers. The installation produces three-piece steel food containers.

- 40 CFR Part 63, Subpart KKKK – National Emission Standards for HAP: Surface Coating of Metal Cans is not applicable to the installation. This regulation only applies to major HAP sources. The installation is a synthetic minor HAP source per Special Condition 1.B.

- 40 CFR Part 63, Subpart HHHHHH – National Emission Standards for HAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources is not applicable to the installation. This regulation applies to the spray application of coatings containing compounds of chromium, lead, manganese, nickel, or cadmium. None of the MSDS provided by the installation list any metal compounds.

- A Triple Filter System is being used to control particulate emissions from ES-3010, ES-3020, and ES-3030 Inside Stripe Applicators and ES-3015, ES-3025, and ES-3035 Outside Stripe Applicators.
This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060 Construction Permits Required. Potential emissions of VOC are above de minimis levels, but below major source levels.

This installation is located in Lawrence County, an attainment 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 for this review. No model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.

Emissions testing is not required for the installation of ES-3015, ES-3025, and ES-3035 Outside Stripe Applicators.

An Intermediate or Part 70 Operating Permit application is required for this installation no later than 90 days after issuance of this permit.

Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Silgan Containers Manufacturing Corporation operates a steel food can manufacturing plant in Mt. Vernon, Missouri. The installation produces three-piece welded cans. To form each can, slitters first cut a pre-coated steel sheet to the specific size required for the particular type of can requested by the customer. The cut plate enters a bodymaker where it is shaped into a cylinder and the seam is resistance welded utilizing a copper wire electrode. A stripe of coating is then applied to the inside of the can along the weld seam to protect against product erosion. The coating is cured in natural gas-fired heat curing ovens. After the can is assembled, a necker reduces the diameter of the can to meet customer specifications. A printed code is applied to each can by videojet printers. The installation consists of three can production lines. Each line is bottlenecked by the rate of the bodymaker. Lines #1 and #2 each contain bodymakers capable of processing 70 m/min. Line #3’s bodymaker is capable of processing 50 m/min.

The following permits have been issued to Silgan Containers Manufacturing Corporation from the Air Pollution Control Program.
<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0390-004</td>
<td>Installation of a natural gas-fired curing oven</td>
</tr>
<tr>
<td>1090-001</td>
<td>Installation of a welding bodymaker, inside seam stripe applicators, and a natural gas-fired curing oven</td>
</tr>
<tr>
<td>0295-012</td>
<td>Installation of an inside seam stripe applicator and a natural gas-fired curing oven</td>
</tr>
<tr>
<td>102001-003</td>
<td>Installation of a welder and videojet printer on Line #2</td>
</tr>
<tr>
<td>072004-011</td>
<td>Installation of an outside stripe applicator on Line #1</td>
</tr>
<tr>
<td>2005-01-023</td>
<td>Basic Operating Permit</td>
</tr>
<tr>
<td>102006-005</td>
<td>Installation of a welder on Line #1</td>
</tr>
</tbody>
</table>

The installation was required by Construction Permit 102006-005 to obtain an Intermediate or Part 70 Operating Permit. As both existing potential VOC emissions from the installation and the new installation conditioned potential VOC emissions exceed the 100 tpy 40 CFR Part 70 major source threshold, the installation is required to apply for an Intermediate or Part 70 Operating Permit no later than 90 days after issuance of this permit.

PROJECT DESCRIPTION

The installation has applied for authority to install outside stripe applicators on Lines #1, #2, and #3. The outside stripe applicators consist of an air atomized spray gun that applies a stripe approximately 0.5 inches wide to the outside of the can along the welded seam to prevent the weld from rusting. Emissions from the coating operation are vented to a Triple Filter System rated at 94.6 percent overall efficiency for particulates. Application of the coating does not increase production on the lines. Outside stripe coating application will occur after seam welding and will be cured in the existing natural gas-fired curing ovens.

An updated equipment list is provided in Table 2.
### Table 2: Installation-wide Equipment List

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Coating/Process SCC</th>
<th>MHDR</th>
<th>Units</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES-3010</td>
<td>Inside Stripe Applicator Line #1</td>
<td>SI 20.2</td>
<td>0.44</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 21.2</td>
<td>0.63</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 22.2</td>
<td>0.67</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 54.2</td>
<td>0.61</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td>ES-3011</td>
<td>Curing Oven Line #1</td>
<td>10300603</td>
<td>0.4</td>
<td>MMBtu/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3012</td>
<td>Videojet Printer Line #1</td>
<td>60/504</td>
<td>0.11</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3013</td>
<td>Cleanup Line #1</td>
<td>thinner</td>
<td>1.32</td>
<td>gal/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>ES-3015</td>
<td>Outside Stripe Applicator Line #1</td>
<td>SI 54.1</td>
<td>0.37</td>
<td>gal/hr</td>
<td>New</td>
</tr>
<tr>
<td>ES-3020</td>
<td>Inside Stripe Applicator Line #2</td>
<td>SI 20.2</td>
<td>0.44</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 21.2</td>
<td>0.63</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 22.2</td>
<td>0.67</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 54.2</td>
<td>0.61</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td>ES-3021</td>
<td>Curing Oven Line #2</td>
<td>10300603</td>
<td>0.4</td>
<td>MMBtu/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3022</td>
<td>Videojet Printer Line #2</td>
<td>60/504</td>
<td>0.11</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3023</td>
<td>Cleanup Line #2</td>
<td>thinner</td>
<td>1.32</td>
<td>gal/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>ES-3025</td>
<td>Outside Stripe Applicator Line #2</td>
<td>SI 54.1</td>
<td>0.37</td>
<td>gal/hr</td>
<td>New</td>
</tr>
<tr>
<td>ES-3030</td>
<td>Inside Stripe Applicator Line #3</td>
<td>SI 20.2</td>
<td>0.32</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 21.2</td>
<td>0.45</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 22.2</td>
<td>0.48</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI 54.2</td>
<td>0.44</td>
<td>gal/hr</td>
<td></td>
</tr>
<tr>
<td>ES-3031</td>
<td>Curing Oven Line #3</td>
<td>10300603</td>
<td>0.4</td>
<td>MMBtu/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3032</td>
<td>Videojet Printer Line #3</td>
<td>60/504</td>
<td>0.11</td>
<td>gal/hr</td>
<td>Existing</td>
</tr>
<tr>
<td>ES-3033</td>
<td>Cleanup Line #3</td>
<td>thinner</td>
<td>0.98</td>
<td>gal/hr</td>
<td>Modified</td>
</tr>
<tr>
<td>ES-3035</td>
<td>Outside Stripe Applicator Line #3</td>
<td>SI 54.1</td>
<td>0.27</td>
<td>gal/hr</td>
<td>New</td>
</tr>
</tbody>
</table>

**EMISSIONS/CONTROLS EVALUATION**

The MHDR of the new Outside Stripe Applicators (ES-3015, ES-3025, and ES-3035) were determined by taking the MHDR of the bodymaker on each line (inches/hr), the maximum desirable film density (g/inch), and the coating density (lb/gal). Lines #1 and #2 are rated at 70 m/min (165,353.83 inches/hr). Line #3 is rated at 50 m/min (118,109.88 inches/hr). An air atomized spray gun on each line applies the coating to reach a film density of up to 4 grams of solids per inch. The coating densities are available in Table 3. The worst-case coating for each pollutant was used in the potential to emit.

**Table 3: Outside Stripe MSDS Information**

<table>
<thead>
<tr>
<th>Coating</th>
<th>Density (lb/gal)</th>
<th>% VOC</th>
<th>% Solids</th>
<th>% HAP</th>
<th>% Individual HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO 15.1</td>
<td>8.07</td>
<td>66.6</td>
<td>33.4</td>
<td>0.41</td>
<td>0.40 MIBK (108-10-1), 0.01 Formaldehyde (50-00-0)</td>
</tr>
<tr>
<td>SO 54.1</td>
<td>8.55</td>
<td>54.5</td>
<td>45.5</td>
<td>8.8</td>
<td>7.1 Xylene (1330-20-7), 1.7 Ethylbenzene (100-41-4)</td>
</tr>
</tbody>
</table>

Potential emissions were calculated using a mass balance approach. VOC and HAP were assumed to be 100 percent emitted. A particle size distribution submitted with the application indicated that 100 percent of the solids were PM and 60 percent of the solids
were PM$_{10}$. The particle size distribution did not indicate any PM$_{2.5}$. A solids transfer efficiency of 50 percent for air atomized spray on flat surfaces was obtained from APTI Course 482 Manual, 3rd Edition, Table 5-7. The flat surface transfer efficiency was chosen rather than the table-leg surface transfer efficiency as the area being coated is only 0.5 inches wide along the side of the can. Such a small width results in very little curvature of the area of the surface being coated. Particulate emissions are controlled by a Triple Filter System. The capture efficiency of the system was assumed to be 95 percent and the manufacturer control efficiency of the Triple Filter System is 99.6 percent resulting in an overall efficiency of 94.6 percent.

To verify that an Intermediate/Part 70 operating permit is required for the installation, potential emissions from the existing equipment were also calculated as part of this project.

Potential emissions from the existing Inside Stripe Applicators (ES-3010, ES-3020, and ES-3030), Videojet Printers (ES-3012, ES-3022, and ES-3032), and Cleanup Solvents (ES-3013, ES-3023, and ES-3033) were calculated using the same methods as those used for the Outside Stripe Applicators. MSDS information for these materials are available in Table 4.

### Table 4: Existing Equipment MSDS Information

<table>
<thead>
<tr>
<th>Coating</th>
<th>Density (lb/gal)</th>
<th>% VOC</th>
<th>% Solids</th>
<th>% HAP</th>
<th>% Individual HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI 20.2</td>
<td>9.1</td>
<td>41.3</td>
<td>58.7</td>
<td>10.45</td>
<td>10.4 Glycol Ethers (20-10-0), 0.05 Formaldehyde (50-00-0)</td>
</tr>
<tr>
<td>SI 21.2</td>
<td>8.07</td>
<td>67.8</td>
<td>32.2</td>
<td>0.61</td>
<td>0.4 MIBK (108-10-1), 0.1 Xylene (1330-20-7), 0.1 Cumene (98-82-8), 0.01 Formaldehyde (50-00-0)</td>
</tr>
<tr>
<td>SI 22.2</td>
<td>8.12</td>
<td>66.4</td>
<td>33.6</td>
<td>0.61</td>
<td>0.4 MIBK (108-10-1), 0.1 Xylene (1330-20-7), 0.1 Cumene (98-82-8), 0.01 Formaldehyde (50-00-0)</td>
</tr>
<tr>
<td>SI 54.2</td>
<td>8.55</td>
<td>54.5</td>
<td>45.5</td>
<td>8.8</td>
<td>7.1 Xylene (1330-20-7), 1.7 Ethylbenzene (100-41-4)</td>
</tr>
<tr>
<td>60/504</td>
<td>6.82</td>
<td>95.73</td>
<td>4.27$^*$</td>
<td>46.45</td>
<td>46.45 Methanol (67-56-1)</td>
</tr>
<tr>
<td>Thinner</td>
<td>7.08</td>
<td>100</td>
<td>-</td>
<td>56.25</td>
<td>29.47 Toluene (108-88-3), 16.07 Xylene (1330-20-7), 10.71 Glycol Ethers (20-10-0)</td>
</tr>
</tbody>
</table>

$^*$Videojet printing is not spray applied; therefore, no particulate emissions are expected to occur.


The following table provides an emissions summary for this project. Existing potential emissions were calculated as part of this project. Existing actual emissions were taken from the installation’s 2011 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year).
### Table 5: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>0.80</td>
<td>N/A</td>
<td>0.47</td>
<td>N/A</td>
</tr>
<tr>
<td>PM_{2.5}</td>
<td>15.0</td>
<td>0.50</td>
<td>0.01</td>
<td>0.28</td>
<td>N/A</td>
</tr>
<tr>
<td>SO_{2}</td>
<td>10.0</td>
<td>0.04</td>
<td>0.01</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NO_{x}</td>
<td>40.0</td>
<td>0.003</td>
<td>0.0004</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>118.42</td>
<td>4.23</td>
<td>80.19</td>
<td>198.61</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>0.43</td>
<td>0.07</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GHG (CO_{2e})</td>
<td>100,000</td>
<td>618.24</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAP</td>
<td>25.0</td>
<td>&lt;25.0</td>
<td>0.44</td>
<td>28.97</td>
<td>&lt;25.0</td>
</tr>
<tr>
<td>Toluene</td>
<td>10.0^{1}</td>
<td>&lt;10.0</td>
<td>0.09</td>
<td>13.43</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Xylene</td>
<td>10.0^{1}</td>
<td>&lt;10.0</td>
<td>0.06</td>
<td>10.01</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Glycol Ethers (20-10-0)</td>
<td>10.0^{2}</td>
<td>&lt;10.0</td>
<td>0.09</td>
<td>4.88</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Methanol</td>
<td>10.0^{1}</td>
<td>4.42</td>
<td>0.18</td>
<td>N/A</td>
<td>4.42</td>
</tr>
<tr>
<td>Ethylbenzene (100-41-4)</td>
<td>10.0^{1}</td>
<td>1.06</td>
<td>N/A</td>
<td>0.64</td>
<td>1.70</td>
</tr>
<tr>
<td>MIBK</td>
<td>10.0^{1}</td>
<td>0.26</td>
<td>0.02</td>
<td>0.21</td>
<td>0.71</td>
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<tr>
<td>Cumene</td>
<td>10.0^{1}</td>
<td>0.06</td>
<td>0.005</td>
<td>N/A</td>
<td>0.13</td>
</tr>
<tr>
<td>Formaldehyde (50-00-0)</td>
<td>10.0^{3}</td>
<td>0.02</td>
<td>0.001</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>Hexane</td>
<td>10.0^{1}</td>
<td>0.01</td>
<td>N/A</td>
<td>N/A</td>
<td>0.01</td>
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N/A = Not Applicable; N/D = Not Determined

\(^{1}\)This value represents both the de minimis level and the SMAL. No modeling is required as potential emissions are below the SMAL.

\(^{2}\)The SMAL for Glycol Ethers (20-10-0) is 5.0 tpy. No modeling is required as potential emissions of the project are below the SMAL.

\(^{3}\)The SMAL for Formaldehyde (50-00-0) is 2.0 tpy. No modeling is required as potential emissions of the project are below the SMAL.

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*. Potential emissions of VOC are above de minimis levels, but below major source levels.
APPLICABLE REQUIREMENTS

Silgan Containers Manufacturing Corporation 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

- 10 CSR 10-6.065 Operating Permits
- 10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information
- 10 CSR 10-6.165 Restriction of Emission of Odors
- 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
- 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060 Construction Permits Required, I recommend this permit be granted with special conditions.

Alana L. Rugen, EIT
New Source Review Unit

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 20, 2013, received March 7, 2013, designating Silgan Containers Manufacturing Corporation as the owner and operator of the installation.

Silgan Containers Manufacturing Corporation  
Lawrence County, S30, T28N, R26W  
Project Number: 2013-03-022  
Installation ID Number: 109-0010  
Permit Number: ________

This sheet covers the period from ____________ to ______________.  
(month, year) (month, year)

<table>
<thead>
<tr>
<th>Material Used (Name, type)</th>
<th>Amount of Material Used (gal)</th>
<th>Density (lb/gal)</th>
<th>HAP Content (Weight percent)</th>
<th>HAP Emissions(^1) (tons)</th>
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**Monthly HAP Emissions\(^2\) (ton/month):**

**12-month Rolling Total HAP Emissions\(^3\) (tpy):**

\(^1\)HAP Emissions (tons) = Amount of Material Used (gal) x Density (lb/gal) x HAP Content (wt%) x 0.0005 (ton/lb)  
\(^2\)Monthly HAP Emissions (ton/month) = The sum of each material’s HAP Emissions (tons)  
\(^3\)12-month Rolling Total HAP Emissions (tpy) = This month’s Monthly HAP Emissions (ton/month) + the previous 11 month’s Monthly HAP Emissions (ton/month) + 0.1 tpy from natural gas combustion. The permittee is in compliance with Special Condition 1.A if 12-month Rolling Total HAP Emissions are less than 25.0 tpy.
Attachment B – Individual HAP Compliance Worksheet

Silgan Containers Manufacturing Corporation
Lawrence County, S30, T28N, R26W
Project Number: 2013-03-022
Installation ID Number: 109-0010
Permit Number: ________

This sheet covers the period from _________ to ___________.

(month, year)   (month, year)

HAP Name: ___________________ CAS No.: ________.

<table>
<thead>
<tr>
<th>Material Used (Name, type)</th>
<th>Amount of Material Used (gal)</th>
<th>Density (lb/gal)</th>
<th>Ind. HAP Content (Weight percent)</th>
<th>Ind. HAP Emissions¹ (tons)</th>
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</table>

**Monthly Ind. HAP Emissions² (ton/month):**

**12-month Rolling Total Ind. HAP Emissions³ (tpy):**

¹Ind. HAP Emissions (tons) = Amount of Material Used (gal) x Density (lb/gal) x Ind. HAP Content (wt%) x 0.0005 (ton/lb)
²Monthly Ind. HAP Emissions (ton/month) = The sum of each material’s Ind. HAP Emissions (tons)
³12-month Rolling Total Ind. HAP Emissions (tpy) = This month’s Monthly Ind. HAP Emissions (ton/month) + the previous 11 month’s Monthly Ind. HAP Emissions (ton/month). The permittee is in compliance with Special Condition 1.A if 12-month Rolling Total Ind. HAP Emissions are less than 10.0 tpy.
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
PM₂₅ ...... 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
SIC ........ Standard Industrial Classification
SIP ......... State Implementation Plan
SMAL .... Screening Model Action Levels
SOₓ ....... sulfur oxides
SO₂ ......... sulfur dioxide
tph ........ tons per hour
tpy .......... tons per year
VMT ......... vehicle miles traveled
VOC ......... Volatile Organic Compound
Mr. Mike Huff
Environmental Engineer
Silgan Containers Manufacturing Corporation
P.O. Box 111
Mt. Vernon, MO 65712

RE: New Source Review Permit - Project Number: 2013-03-022

Dear Mr. Huff:

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 applying for an Intermediate or Part 70 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.

If you have any questions regarding this permit, please do not hesitate to contact Alana Rugen, 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:arl

Enclosures

c: Southwest Regional Office
   PAMS File: 2013-02-022

Permit Number: