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: 102014-007
Project Number: 2014-06-045
Installation Number: 127-0037

Parent Company: The Knapheide Manufacturing Company
Parent Company Address: Highway 24, West Quincy, MO 63471
Installation Name: The Knapheide Manufacturing Company
Installation Address: Highway 24, West Quincy, MO 63471
Location Information: Marion County, S10, T59N, R5W

Application for Authority to Construct was made for:
Installation of a new paint booth (EP-20). 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.

OCT - 7 2014
EFFECTIVE DATE
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 paragraph (12)(A)10. “Conditions required by permitting authority.”

The Knapheide Manufacturing Company
Marion County, S10, T59N, R5W

1. VOC Emission Limitation
   A. The Knapheide Manufacturing Company shall emit less than 40.0 tons of VOCs in any consecutive 12-month period from the entire installation, as listed in Table 1.
   B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.

2. Total HAPs Emission Limitation
   A. The Knapheide Manufacturing Company shall emit less than 25.0 tons combined of HAPs in any consecutive 12-month period from the entire installation, as listed in Table 1.
   B. Attachment C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 2.A.

3. Individual HAPs Emission Limitation
   A. The Knapheide Manufacturing Company shall emit less than 10.0 tons each of Toluene (108-88-3), Ethyl Benzene (100-41-4), Naphthalene (91-20-3), Xylene (1330-20-7), and Methanol (67-56-1), 5.0 tons of Diethylene Glycol Monobutyl Ether (112-34-5) and 0.02 tons each of Cumene (98-82-8) and 1,6 Hexamethylene diisocyanate (822-06-0) in any consecutive 12-month period from the entire installation, as listed in Table 1.
   B. Attachment B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 3.A.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

4. Control Device Requirement – Polyester Filters
   A. The Knapheide Manufacturing Company shall control particulate emissions from the paint booths (EP-20) using filters as specified in the permit application. The filters shall be operated and maintained in accordance with the manufacturer's specifications.
   
   B. Replacement polyester filters for the paint booth 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).
   
   C. The Knapheide Manufacturing Company shall maintain an operating and maintenance log for the filters 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.

5. Capture Device Requirement – Permanent Total Enclosure
   A. The Knapheide Manufacturing Company shall capture emissions from the spray applied surface coating operation with a booth and exhaust fan(s).
   
   B. Negative pressure shall be demonstrated and recorded at all booth openings at least once every 24 hours using visual indication such as streamers, powder puff, smoke, or other method preapproved by the Air Pollution Control Program. Periods when spray applied surface coating is non-operational shall be recorded.
   
   C. The Knapheide Manufacturing Company shall maintain an operating and maintenance log associated with each permanent total enclosure which shall include the following:
      1) Incidents of malfunction, with impact on emissions, time, date and 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:

6. Operational Requirement - Solvent/Paint Cloths
   A. The Knapheide Manufacturing Company shall keep the paint solvents and cleaning solutions in sealed containers whenever the materials are not in use. The Knapheide Manufacturing Company shall provide and maintain suitable, easily read, permanent markings on all paints, solvent and cleaning solution containers used with this equipment.
   
   B. No more than one spray gun shall operate at one time in paint booth (EP-20).

7. Record Keeping and Reporting Requirements
   A. The Knapheide Manufacturing Company 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. The Knapheide Manufacturing Company shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

8. Superseding Condition
   The conditions of this permit supersede all special conditions found in Construction Permit 112005-003, which was issued by the Air Pollution Control Program.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2014-06-045
Installation ID Number: 127-0037
Permit Number:

The Knapheide Manufacturing Company Complete: June 30, 2014
Highway 24
West Quincy, MO 63471

Parent Company: The Knapheide Manufacturing Company
Highway 24
West Quincy, MO 63471

Marion County, S10, T59N, R5W

REVIEW SUMMARY

• The Knapheide Manufacturing Company has applied for authority for the installation of a new paint booth (EP-20).

• HAP emissions are expected from the proposed equipment. HAPs emitted from this process are Xylene, Diethylene Glycol Monobutyl Ether, Ethyl Benzene, Cumene, Naphthalene and Toluene. The combined and individual HAP emissions are limited to their de minimis level and SMAL.

• The MACT standard, 40 CFR Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources applies to the proposed equipment because it will be painting metal automotive parts. However, the proposed coatings this installation will use does not contain target HAPs (chromium, lead, manganese, nickel, or cadmium) as listed in this regulation.

• The NSPS Standard, 40 CFR 60 Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations, does not apply to the installation because it is not an automotive assembly plant.

• Polyester filters are being used to control the particulate 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 VOCs and combined HAPs are conditioned below de minimis levels. Individual HAPs are limited to their respective SMAL.

• This installation is located in Marion County, an attainment area for all other 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 their respective de minimis levels and HAP SMALS.

- Emissions testing is not required for the paint gun.

- A Basic Operating Permit application is not required for this installation because it will remain a de minimis source for criteria pollutants and the MACT Subpart HHHHHH does not require an automatic operating permit.

- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Per the applicant, there are two existing paint booths on site. One is dedicated to paint truck bed liners and the other paint booth is dedicated to paint metal truck parts and truck body parts. The installation includes the emission sources listed in Table 1.

**Table 1: Summary of Installation’s Emission Sources**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>Natural gas heaters</td>
</tr>
<tr>
<td>EP-17</td>
<td>Bed liner paint booth</td>
</tr>
<tr>
<td>EP-18</td>
<td>Metal truck parts/ truck body parts paint booth</td>
</tr>
<tr>
<td>EP-19</td>
<td>Drying Oven</td>
</tr>
<tr>
<td>EP-20</td>
<td>Metal truck parts/ truck body parts paint booth</td>
</tr>
</tbody>
</table>

The following New Source Review permits have been issued to The Knapheide Manufacturing Company from the Air Pollution Control Program.

**Table 2: Permit History**

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0280-001</td>
<td>The installation of a Brule FG4-T5 incinerator. This incinerator has been removed from the site.</td>
</tr>
<tr>
<td>112005-003</td>
<td>The installation of a paint booth (EP-18) and a 4 MMBtu oven (EP-19).</td>
</tr>
</tbody>
</table>
PROJECT DESCRIPTION

This project includes the installation of Paint Line 19 Paint Booth (EP-20). The Knapheide Manufacturing Company (Knapheide Manufacturing) has two existing paint booths but the proposed paint booth will paint truck parts in a different color. The bottleneck of this paint booth is the paint gun, which is the SATAjet 3000 B RP paint gun that has the transfer efficiency of at least 65%. The maximum spraying capacity of the gun was determined by the applicant. The paint gun sprayed a paint that is used on site into a bucket for 5 minutes and 4 seconds. During this time, 0.9 quarts of paint was collected. As a result, 2.66 gallons per hour was determined to be the MHDR of the gun. If this paint gun is used continuously (8760 hours per year), 23,302 gallons of materials would be sprayed in one year. This maximum annual throughput was used during the review of this project. This paint booth is equipped with polyester paint filters and have a control efficiency of 95% for particulate emissions. There are no control devices for VOC emissions.

Each truck body part that will be painted at this facility arrives coated with a primer. The primed coat is scuffed with a handheld sander to promote adhesion to top coat. If too much primer is removed, a primer and primer activator mixture is sprayed onto the truck part. Then each truck part is painted with a top coat and top coat activator mixture. The spray gun is cleaned after the primer mixture and topcoat mixture are sprayed.

Since the primer is sprayed when too much primer is removed from the truck part, the amount of primer removed is approximately equal the amount that will be sprayed. The particulate emissions from the scuffing were conservatively assumed to be equal to the particulate emissions of spraying the primer.

EMISSIONS/CONTROLS EVALUATION

The emissions of this project were calculated using a mass balance approach in conjunction with the MSDS of the top coat, top coat activator, primer, primer activator and gun wash. Based on the information from the manufacturer of the paint gun, it has a transfer efficiency of at least 65%, which was used in the calculation of particulate emissions. It was assumed that 100% VOCs and volatile HAPs would be emitted. A 95% control efficiency for particulate emissions was used for the use of polyester paint filters. Because the painting will be done in an enclosed booth, a capture efficiency of 100% was assumed. Total HAP emissions were conservatively calculated to include all maximum individual HAP emissions from each material used to evaluate a worst-case scenario.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Construction Permit 112005-003. Existing actual emissions were taken from the installation’s 2013 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

- 8 -
### Table 3: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>4.40</td>
<td>N/A</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>15.0</td>
<td>0.88</td>
<td>0.02</td>
<td>4.40</td>
<td>N/A</td>
</tr>
<tr>
<td>PM₂₅</td>
<td>10.0</td>
<td>N/D</td>
<td>0.02</td>
<td>4.40</td>
<td>N/A</td>
</tr>
<tr>
<td>SO₂</td>
<td>40.0</td>
<td>0.003</td>
<td>N/D</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOₓ</td>
<td>40.0</td>
<td>0.58</td>
<td>0.20</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>&lt; 40.0</td>
<td>8.27</td>
<td>53.59</td>
<td>&lt; 40.0</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>0.48</td>
<td>0.17</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>&lt; 25.0</td>
<td>N/D</td>
<td>47.40</td>
<td>&lt; 25.0</td>
</tr>
<tr>
<td>Xylene (1330-20-7)</td>
<td>10.0 b</td>
<td>3.50</td>
<td>N/D</td>
<td>2.86</td>
<td>&lt; 10.0</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether (112-34-5)</td>
<td>5.0 b</td>
<td>N/A</td>
<td>N/D</td>
<td>2.73</td>
<td>&lt; 5.0</td>
</tr>
<tr>
<td>Ethyl Benzene (100-41-4)</td>
<td>10.0 b</td>
<td>0.82</td>
<td>N/D</td>
<td>0.57</td>
<td>&lt; 10.0</td>
</tr>
<tr>
<td>Cumene (98-82-8)</td>
<td>0.02 b</td>
<td>N/A</td>
<td>N/D</td>
<td>0.36</td>
<td>&lt; 0.02</td>
</tr>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>10.0 b</td>
<td>N/A</td>
<td>N/D</td>
<td>1.18</td>
<td>&lt; 10.0</td>
</tr>
<tr>
<td>Toluene (108-88-3)</td>
<td>10.0 b</td>
<td>&lt; 10.0</td>
<td>N/D</td>
<td>47.40</td>
<td>&lt; 10.0</td>
</tr>
<tr>
<td>1,6 Hexamethylene diisocyanate (822-06-0)</td>
<td>0.02 b</td>
<td>&lt; 0.02</td>
<td>N/D</td>
<td>N/A c</td>
<td>&lt; 0.02</td>
</tr>
<tr>
<td>Methanol (67-56-1)</td>
<td>10.0 b</td>
<td>&lt; 10.0</td>
<td>N/D</td>
<td>N/A c</td>
<td>&lt; 10.0</td>
</tr>
</tbody>
</table>

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

a Since annual VOC, combined HAPs and individual HAP emissions will be limited, particulate emissions will be indirectly limited below de minimis levels.

b Screening Model Action Level (SMAL) of each individual HAP

c These HAPS are not emitted from the proposed coatings for this project and are from the review of Construction Permit 112005-003

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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 PM₂₅, VOCs, combined HAPs and individual HAPs are conditioned below de minimis levels and the SMAL of each HAP.
APPLICABLE REQUIREMENTS

The Knapheide Manufacturing Company 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

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
- 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

- National Emission Standards for Hazardous Air Pollutants for Source Categories (a.k.a. Maximum Achievable Control Technology (MACT)), 10 CSR 10-6.075,
  - Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR Part 63, Subpart HHHHHH. However, the proposed coatings this installation will use does not contain target HAPs (chromium, lead, manganese, nickel, or cadmium) as listed in this regulation.

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, I recommend this permit be granted with special conditions.

Daronn A. Williams Date
New Source Review Unit

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 12, 2014, received June 17, 2014, designating The Knapheide Manufacturing Company as the owner and operator of the installation.
Attachment A  
Annual VOC Record Keeping Sheet  
The Knapheide Manufacturing Company  
Marion County, S10, T59N, R5W  
Project Number: 2014-06-045  
Installation ID Number: 127-0037  
Permit Number:  

This sheet covers the month of _____________ in the year _____________.  
Copy this sheet as needed. Use additional sheets as necessary.  

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2 (a)</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
</table>
| Material Used  
(Name, Type) | Amount of Material Used  
(Include Units) | Density  
(lbs/gal) | VOC Content  
(Weight %) | VOC Emissions  
(Tons) |
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</tbody>
</table>

(b) Total VOC Emissions Calculated for this Month in Tons:  
(c) 12-Month VOC Emissions Total from Previous Month's Worksheet A, in Tons:  
(d) Monthly VOC Emissions Total (b) from Previous Year's Worksheet A, in Tons:  
(e) Current 12-month Total of VOC Emissions in Tons: [(b) + (c) - (d)]

Instructions: Choose appropriate VOC calculation method for units reported:  
(a) 1) If usage is in tons - [Column 2] x [Column 4] = [Column 5];  
2) If usage is in pounds - [Column 2] x [Column 4] x [0.0005] = [Column 5];  
3) If usage is in gallons - [Column 2] x [Column 3] x [Column 4] x [0.0005] = [Column 5].  
(b) Summation of [Column 5] in Tons;  
(c) 12-Month VOC emissions total (e) from last month's Worksheet A, in Tons;  
(d) Monthly VOC emissions total (b) from previous year's Worksheet A, in Tons;  
(e) Calculate the new 12-month VOC emissions total. A 12-Month VOC emissions total (e) of less than 40.0 tons from the entire installation, as shown in Table 1, indicates compliance.
## Attachment B
### Total HAPs Record Keeping Sheet
The Knapheide Manufacturing Company
Marion County, S10, T59N, R5W
Project Number: 2014-06-045
Installation ID Number: 127-0037
Permit Number:

This sheet covers the month of __________________ in the year __________________.

Copy this sheet as needed. Use additional sheets as necessary.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2 (a)</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Used (Name, Type)</td>
<td>Amount of Material Used (Include Units)</td>
<td>Density (lbs/gal)</td>
<td>HAP Content (Weight %)</td>
<td>HAP Emissions (Tons)</td>
</tr>
</tbody>
</table>

(b) Total HAP Emissions Calculated for this Month in Tons:

(c) 12-Month HAP Emissions Total from Previous Month's Worksheet A, in Tons:

(d) Monthly HAP Emissions Total (b) from Previous Year's Worksheet A, in Tons:

(e) Current 12-month Total of HAP Emissions in Tons: [(b) + (c) - (d)]

### Instructions: Choose appropriate VOC calculation method for units reported:

(a) 1) If usage is in tons - [Column 2] x [Column 4] = [Column 5];
2) If usage is in pounds - [Column 2] x [Column 4] x [0.0005] = [Column 5];
3) If usage is in gallons - [Column 2] x [Column 3] x [Column 4] x [0.0005] = [Column 5].

(b) Summation of [Column 5] in Tons;

(c) 12-Month HAP emissions total (e) from last month's Worksheet A, in Tons;

(d) Monthly HAP emissions total (b) from previous year's Worksheet A, in Tons;

(e) Calculate the new 12-month HAP emissions total. A 12-Month HAP emissions total (e) of less than **25.0 tons**, as shown in Table 1, indicates compliance.
Attachment C
Individual HAP Record Keeping Sheet
The Knapheide Manufacturing Company
Marion County, S10, T59N, R5W
Project Number: 2014-06-045
Installation ID Number: 127-0037
Permit Number:

HAP Name: ______________________________ CAS No.: ______________________________

This sheet covers the month of ____________ in the year ____________.

*Copy this sheet as needed. Use additional sheets as necessary for each HAP.*

<table>
<thead>
<tr>
<th>Column 1 (a)</th>
<th>Column 2 (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>List materials from Attachment B which emit this specific HAP (Name, Type)</td>
<td>HAP emissions from Attachment B [Column 5]</td>
</tr>
<tr>
<td></td>
<td>(in Tons)</td>
</tr>
<tr>
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(c) Total HAP Emissions Calculated for this Month, in Tons: __________________

(d) 12-Month HAP Emissions Total (f) from Previous Month's Attachment C, in Tons: __________________

(e) Monthly HAP Emissions Total (c) from Previous Year's Attachment C, in Tons: __________________

(f) Current 12-month Total of Individual HAP Emissions in Tons: 

\[
[(c) + (d) - (e)]
\]

INSTRUCTIONS:
(a) Individually list each material which emits this specific HAP from this installation;
(b) Record the amount of HAP emissions already calculated for Attachment B in [Column 5] in Tons;
(c) Summation of [Column 2] in Tons;
(d) Record the previous 12-Month individual HAP emission total (f) from last month's Attachment C, in Tons;
(e) Record the monthly HAP emission total (c) from previous year's Attachment C, in Tons;
(f) Calculate the new 12-month individual HAP emissions total. A 12-Month Individual HAP total (f) of less than **10.0 tons** each of Toluene (108-88-3), Ethyl Benzene (100-41-4), Naphthalene (91-20-3), Xylene (1330-20-7), and Methanol (67-56-1), **5.0 tons** of Diethylene Glycol Monobutyl Ether (112-34-5) and **0.02 tons** each of Cumene (98-82-8) and 1,6 Hexamethylene diisocyanate (822-06-0) in any consecutive 12-month period from the entire installation, as listed in Table 1, indicates compliance.
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
tph tons per hour
tpy tons per year
VMT vehicle miles traveled
VOC Volatile Organic Compound
Mr. Bernie Ott  
Environmental Engineer  
The Knapheide Manufacturing Company  
P. O. Box 7140  
Quincy, IL 62305-7140


Dear Mr. Ott:

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 with your new source review permit application is 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 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 of 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, Truman State Office Building, Room 640, 301 W. High Street, 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 Daronn A. Williams, 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:dwl

Enclosures

c: Northeast Regional Office  
PAMS File: 2014-06-045  
Permit Number: