Permit Number: 102006-004  Project Number: 2006-07-063
Owner: Kitco, Inc.
Owner’s Address: 520 NE Enterprise Drive, Warrensburg, MO 64093
Installation Name: Kitco, Inc.
Installation Address: 520 NE Enterprise Drive, Warrensburg, MO 64093
Location Information: Johnson County, S19, T46N, R25W
Application for Authority to Construct was made for:

Relocation of the plant from Odessa MO to Warrensburg MO. The plant will change from one (1) dedicated gel coat spray booth to three dedicated (3) gelcoat spray booths with a Maximum Hourly Design Rate (MHDR) of 0.18 tons of gel coat per hour and change from 3 dedicated resin spray booths to two (2) dedicated resin spray booths with a MHDR of 0.36 tons of resin per hour. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.
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. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. 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 this (these) air contaminant source(s).

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 as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.
Relocation of the plant from Odessa MO to Warrensburg MO. The plant will change from one (1) dedicated gel coat spray booth to three dedicated (3) gelcoat spray booths with a Maximum Hourly Design Rate (MHDR) of 0.18 tons of gel coat per hour and change from 3 dedicated resin spray booths to two (2) dedicated resin spray booths with a MHDR of 0.36 tons of resin per hour. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.
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.”

Kitco, Inc.
Johnson County, S19, T46N, R25W

1. Emission Limitation
   A. Kitco, Inc. shall emit less than 40 tons of Volatile Organic Compounds (VOCs) from the entire installation in any consecutive 12-month period.
   B. Kitco, Inc. shall emit less than ten (10) tons individually or twenty-five (25) tons combined of Hazardous Air Pollutants (HAPs) from the entire installation in any consecutive 12-month period.
   C. Attachment A, B, C, D, E and F or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A) and 1(B). Kitco, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used at the installation.
   D. Kitco, Inc. shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(C) indicate that the source exceeds the limitation of Special Conditions Number 1(A) or 1(B).

2. Continuing Nuisance Odor Situation –Corrective Action Plan Requirements
   If a continuing situation of demonstrated nuisance odors exists in violation of 10 CSR 10-4.070, Restriction of Emission of Odors, the Director may require the Kitco, Inc. to submit a corrective action plan within ten (10) days of the request (or alternate schedule if approved by the Director) that is adequate to timely and significantly mitigate the cause(s) of the odors. Kitco, Inc. shall implement any such plan immediately upon its approval by the Director. Failure to either submit such a corrective action plan if requested or to implement such a plan after approval by the Director shall be a violation of this permit.
SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

3. Kitco, Inc. shall keep the mold preps and cleaning solutions in sealed containers whenever the materials are not in use. Kitco, Inc. shall provide and maintain suitable, easily read, permanent markings on all mold preps and cleaning solution containers used with this equipment.
REVIEW SUMMARY

• Kitco, Inc. has applied for authority to relocate the plant to Johnson County and rearrange the spray booth equipment and install an additional gel-coat spray booth.

• Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. The main HAPs of concern from this process are styrene (100-42-5), methyl methacrylate (80-62-6), methyl ethyl ketone (78-93-3), methyl isobutyl ketone (108-10-1), toluene (108-88-3), and dimethyl phthalate (13-11-3).

• None of the New Source Performance Standards (NSPS) apply to the proposed equipment.

• None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment. Subpart VVVV, Boat Manufacturing, and Subpart WWWW, Reinforced Plastic Composites Production, do not apply to this installation since the conditions of this permit limit the HAP emissions from the entire installation to below major source levels. If Kitco, Inc., ever exceeds the HAP limitations of this permit, or installs new equipment that is not added to a federally enforceable permit condition that limits the installation wide HAP emissions to below major source levels, then the MACT standards would become applicable to the installation.

• No air pollution control equipment is being used in association with the new equipment.

• This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of VOC and HAPs are conditioned below de minimis levels.
- This installation is located in Johnson County, an attainment area for all criteria air pollutants.

- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was performed to determine the ambient impact of styrene.

- Emissions testing is not required for the equipment.

- No operating permit is required at this new location.

- Approval of this permit is recommended with special conditions.

**INSTALLATION DESCRIPTION**

Kitco, Inc. (Kitco) was located in Odessa County with a FIPS county and plant identification number 107-0037. This construction permit authorizes the plant at 107-0037 to move to Johnson County with FIPS county and plant identification number 101-0057. The Johnson County plant manufactures fiberglass components for boats, vans, and trucks using both open and closed molding processes.

Kitco fabricates the molds that are used for each product line. The molds are prepared by means of an open mold operation where the tooling gel is rolled on manually and after curing, a tooling resin is applied. The molds are then sprayed with a gel coat application. As the gel coat represents the outer layer of the final product, it provides color. The client dictates the desired color used, and thereby dictates the specific gel coat used. Because of the possibility of different colors of gel coat, emission point one (EP-1) is set up with four non-atomized spray guns having a maximum hourly design rate of 0.18 tons of gel coat per hour. Each gun is dedicated to a specific color in order to reduce clean up requirements. No more than one spray gun will be operated at any one time. Three spray booths are now designated for this process with one paint gun out of four being used and one color in each booth utilized at any given time (EP-01). EP-01 previously was one (1) spray booth and with this permit will be three (3) spray booths.

Reinforced resin is applied on top of the gel coat and, depending on product line and available molds, will be conducted as either an open mold or closed mold process. Prior to this permit and at the old location three (3) spray booths were designated for the open mold operations. With this permit two (2) spray booths are designated for the resin. Each spray booth is equipped with a single non-atomized gun with a maximum hourly design rate of 0.36 tons or resin per hour.

One hot pressure feed system rated at 0.06 tons/hour, serves the closed mold operations for reinforced resin application. The vacuum molds reduces fugitive emissions from the resin during curing (EP-06).
Finally, the fiberglass components are lightly sanded, as needed, in order to remove any rough areas. A fireproof coating may be applied at this point. The fireproof coating is applied using a gravity feed gun with a maximum design rate of 0.01 tons per hour (EP-07). Final equipment cleaning is completed by hand with acetone. Acetone has been de-listed as a VOC and will not be considered in permit VOC calculations.

In addition to the two construction permits issued to Kitco, the Air Pollution Control Program has also issued a Part 70 Operating Permit (Permit Number OP2001-044) to Kitco for the above described operations. The Part 70 Operating Permit was required since the potential HAP emissions from the installation was above the major source levels of 10.0 tons for any single HAP and 25.0 tons for all HAPs combined. With the issuance of this permit, Kitco will be limited to below the major source threshold for HAPs from the entire installation. Thus, an operating permit is not required. If this installation wide emission limit is removed in the future or Kitco installs new equipment which is not included in the installation wide limit by a federally enforceable limitation, then Kitco will need to apply for a new operating permit.

PROJECT DESCRIPTION

Kitco, Inc. has applied for the authority to move the plant and install an additional gel coat spray booth with a spray gun capacity of 0.18 tons/hour and change a spray booth from being dedicated to resin to being dedicated to gelcoat. The spray guns in the spray booths have different MHDR when dedicated to resin or gel coat. The new total maximum hourly capacity for EP-01 is 0.54 tons/hour and has three booths.

Potential styrene, methyl methacrylate, toluene, and dimethyl phthalate emissions from the existing installation are above 10.0 tons per year. Kitco, Inc. requested in the permit application to have the HAP and VOC emissions from the entire installation limited to 10.0 tons per year for any single HAP, 25.0 tons per year for all HAPs, and 40.0 tons per year of VOC. Thus, the record keeping pages attached to this permit are for styrene, methyl methacrylate, toluene, and dimethyl phthalate, all HAPs, and VOCs.

EMISSIONS/CONTROLS EVALUATION

Styrene is the main pollutant of concern in this project because the potential emissions for styrene exceed the 112(g) de minimis levels of 1.0 tons per year. Styrene is considered both a HAP and a VOC. Based upon the MSDS sheets supplied by Kitco, Inc., the resin contains methyl methacrylate. The emission factor used to calculate the potential styrene emissions of this project was calculated using equations found in the MACT standard, Subpart WWWW, *Reinforced Plastic Composites Production*. The equation used was for open nonatomized spray, nonatomized mechanical, manual applications and vacuum closed mold applications.

In addition to styrene, methyl ethyl ketone will be emitting in small amounts for the process. Methyl ethyl ketone is contained in the catalyst. The catalyst is added to the
resin in order to initiate the polymerization reaction. The MEK and Dimethyl Phthalate were calculated based upon speciating the VOC and HAPs an assuming a 4% loss.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions (Note 1)</th>
<th>Existing Actual Emissions (Note 1)</th>
<th>Potential Emissions of the Application</th>
<th>Installation Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>1161.17</td>
<td>40.0</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.0</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>682.86</td>
<td>10.0/25.0</td>
</tr>
<tr>
<td>Styrene</td>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>556.23</td>
<td>10.0</td>
</tr>
<tr>
<td>Toulene</td>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>49.94</td>
<td>10.0</td>
</tr>
<tr>
<td>Methyl Methacrylate</td>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>36.00</td>
<td>10.0</td>
</tr>
<tr>
<td>Dimethyl Phthalate</td>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>26.05</td>
<td>10.0</td>
</tr>
<tr>
<td>Methyl Isobutyl Keytone</td>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>8.32</td>
<td>10.0</td>
</tr>
</tbody>
</table>

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

Note 1: The plant at 101-0057 is considered a new installation. Existing potential emissions and existing actual emission are not applicable.

The potential to emit is based on maximum hourly design rate (MHDR) and weighted average of variable emission factors using 2005 production data. Based on Part 63 Subpart WWWW, emission factors are tied to the method of application and the weight percent of the constituent HAP. All of the HAPs are also VOC’s and are counted in the VOC totals.

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 HAPs and VOC are limited to de minimis levels.

APPLICABLE REQUIREMENTS

Kitco, Inc. 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
  The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.

- 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 10-3.090

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of styrene because the potential emissions for styrene exceed the 112(g) de minimis levels of 1.0 tons per year. For purposes of this screening analysis, the Screen 3 modeling program was utilized using the following stack parameters: diameter of 1.67 feet, a height of 40 feet, a flow rate of 8,000 cubic feet per minute, and ambient air temperature. The following table lists the modeled impacts and the Risk Assessment Levels (RAL) for styrene in units of micrograms per cubic meter.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Modeled Impact</th>
<th>RAL</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene</td>
<td>757</td>
<td>2240</td>
<td>24-hour</td>
</tr>
<tr>
<td></td>
<td>151</td>
<td>333</td>
<td>Annual</td>
</tr>
</tbody>
</table>
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.

Tim Hines
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 7, 2006, received July 20, 06 designating Kitco, Inc. as the owner and operator of the installation.

- Kansas City Regional Office Site Survey, dated August 16, 2006

- Material Safety Data Sheets (MSDS) submitted with the application.
Attachment A – Styrene Compliance Worksheet

Kitco, Inc.
Johnson County, S19, T46N, R25W
Project Number: 2006-07-063
Installation ID Number: 101-0057
Permit Number:

This sheet covers the period from _______________ to _______________.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Point</td>
<td>Material ID (Note 1)</td>
<td>Amount Used (tons)</td>
<td>Styrene Percent (Note 2)</td>
<td>Emission Factor (lbs/ton) (Note 3)</td>
<td>Emissions (tons) (Note 4)</td>
</tr>
<tr>
<td>EP-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Styrene Emissions from the Installation for this Month (Note 5)
12-Month Styrene Emissions Total from the Previous Month’s Worksheet (Note 6)
Monthly Styrene Emissions Total from the Previous Year’s Worksheet (Note 7)
Current 12-Month Total Styrene Emissions (Note 8)

Note 1: Unique identification of material used.
Note 2: Percent styrene should come from each material's MSDS. If a range is given for the styrene content then the highest value of that range should be used.
Note 3: Emission Factor should be calculated using appropriate equations found in Subpart WWWW of CFR Part 63.
Note 4: (Column F) = (Column C) • (Column E) • 0.0005
Note 5: Sum of styrene emissions reported in Column F
Note 6: Running 12-month total of emissions from previous month’s worksheet
Note 7: Emissions reported for this month in the last calendar year.
Note 8: Amount reported in Note 6 minus amount reported in Note 7 plus amount reported in Note 5

Note: If Kitco, Inc. wishes to simplify the record keeping, they may calculate an emissions factor using the material with the highest styrene content and use that emission factor for all the materials.
**Attachment B – Methyl Methacrylate (MMA) Compliance Worksheet**

Kitco, Inc.
Johnson County, S19, T46N, R25W
Project Number: 2006-07-063
Installation ID Number: 101-0057
Permit Number:

This sheet covers the period from __________ to __________.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Point</td>
<td>Material ID</td>
<td>Amount Used</td>
<td>MMA Percent</td>
<td>Emission Factor</td>
<td>Emissions</td>
</tr>
<tr>
<td></td>
<td>(Note 1)</td>
<td>(tons)</td>
<td>(Note 2)</td>
<td>(lbs/ton)</td>
<td>(tons)</td>
</tr>
<tr>
<td>EP-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total MMA Emissions from the Installation for this Month (Note 5)
12-Month MMA Emissions Total from the Previous Month’s Worksheet (Note 6)
Monthly MMA Emissions Total from the Previous Year’s Worksheet (Note 7)
Current 12-Month Total MMA Emissions (Note 8)

Note 1: Unique identification of material used.
Note 2: Percent MMA should come from each material’s MSDS. If a range is given for the MMA content then the highest value of that range should be used.
Note 3: Emission Factor should be calculated using appropriate equations found in Subpart WWWW of CFR Part 63.
Note 4: \((\text{Column F} = (\text{Column C} \times \text{Column E}) \times 0.0005)\)
Note 5: Sum of MMA emissions reported in Column F
Note 6: Running 12-month total of emissions from previous month’s worksheet
Note 7: Emissions reported for this month in the last calendar year.
Note 8: Amount reported in Note 6 minus amount reported in Note 7 plus amount reported in Note 5

Note: If Kitco, Inc. wishes to simplify the record keeping, they may calculate an emissions factor using the material with the highest MMA content and use that emission factor for all the materials.
Attachment C – Toluene Compliance Worksheet

Kitco, Inc.
Johnson County, S19, T46N, R25W
Project Number: 2006-07-063
Installation ID Number: 101-0057
Permit Number:

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

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Point</td>
<td>Material ID (Note 1)</td>
<td>Amount Used (tons)</td>
<td>Toluene Percent (Note 2)</td>
<td>Emission Factor (lbs/ton) (Note 3)</td>
<td>Emissions (tons) (Note 4)</td>
</tr>
<tr>
<td>EP-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Toluene Emissions from the Installation for this Month (Note 5)
12-Month Toluene Emissions Total from the Previous Month’s Worksheet (Note 6)
Monthly Toluene Emissions Total from the Previous Year’s Worksheet (Note 7)
Current 12-Month Total Toluene Emissions (Note 8)

Note 1: Unique identification of material used.
Note 2: Percent toluene should come from each material’s MSDS. If a range is given for the styrene content then the highest value of that range should be used.
Note 3: Emission Factor should be calculated using appropriate equations found in Subpart WWWW of CFR Part 63.
Note 4: (Column F) = (Column C) • (Column E) • 0.0005
Note 5: Sum of toluene emissions reported in Column F
Note 6: Running 12-month total of emissions from previous month’s worksheet
Note 7: Emissions reported for this month in the last calendar year.
Note 8: Amount reported in Note 6 minus amount reported in Note 7 plus amount reported in Note 5

Note: If Kitco, Inc. wishes to simplify the record keeping, they may calculate an emissions factor using the material with the highest toluene content and use that emission factor for all the materials.
Attachment D – Dimethyl Phthalate Compliance Worksheet

Kitco, Inc.
Johnson County, S19, T46N, R25W
Project Number: 2006-07-063
Installation ID Number: 101-0057

This sheet covers the period from __________________ to ________________.

(month, year)     (month, year)

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Point</td>
<td>Material ID (Note 1)</td>
<td>Amount Used (tons)</td>
<td>Dimethyl Phthalate Percent (Note 2)</td>
<td>Emission Factor (lbs/ton) (Note 3)</td>
<td>Emissions (tons) (Note 4)</td>
</tr>
<tr>
<td>EP-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-2</td>
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<td>EP-4</td>
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<td>EP-6</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Dimethyl Phthalate Emissions from the Installation for this Month (Note 5)

12-Month Dimethyl Phthalate Emissions Total from the Previous Month’s Worksheet (Note 6)

Monthly Dimethyl Phthalate Emissions Total from the Previous Year’s Worksheet (Note 7)

Current 12-Month Total Dimethyl Phthalate Emissions (Note 8)

Note 1: Unique identification of material used.
Note 2: Percent Dimethyl Phthalate should come from each material’s MSDS. If a range is given for the styrene content then the highest value of that range should be used.
Note 3: Emission Factor should be calculated using appropriate equations found in Subpart WWWW of CFR Part 63.
Note 4: \((\text{Column F}) = (\text{Column C}) \cdot (\text{Column E}) \cdot 0.0005\)
Note 5: Sum of Dimethyl Phthalate emissions reported in Column F
Note 6: Running 12-month total of emissions from previous month’s worksheet
Note 7: Emissions reported for this month in the last calendar year.
Note 8: Amount reported in Note 6 minus amount reported in Note 7 plus amount reported in Note 5

Note: If Kitco, Inc. wishes to simplify the record keeping, they may calculate an emissions factor using the material with the highest Dimethyl Phthalate content and use that emission factor for all the materials.
### Attachment E – Total HAP Compliance Worksheet

Kitco, Inc.  
Johnson County, S19, T46N, R25W  
Project Number: 2006-07-063, Installation ID Number: 101-0057, Permit Number: ________

This sheet covers the period from ___________ to ___________.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
<th>Column G</th>
<th>Column H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Point</td>
<td>Catalyst ID (Note 1)</td>
<td>Amount of Catalyst Used (lbs)</td>
<td>Weight Percent MEK (Note 2)</td>
<td>MEK Emissions (tons) (Note 3)</td>
<td>Weight Percent (Note 2)</td>
<td>Emissions (tons) (Note 4)</td>
<td>Total HAP Emissions (tons) (Note 5)</td>
</tr>
<tr>
<td>EP-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emission Point</td>
<td>Material ID</td>
<td>Amount of Material Used (lbs)</td>
<td>Weight Percent HAPs (Note 6)</td>
<td>Total HAP Emissions (tons) (Note 7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Styrene Emissions from Attachment A (Note 8)  
Total Methyl Methacrylate Emissions from Attachment B (Note 9)  
Total Toluene Emissions from Attachment C (Note 10)  
Total Dimethyl Phthalate Emissions from Attachment D (Note 11)  
Total HAP Emissions from the Installation for this Month (Note 12)  
12-Month HAP Emissions Total from the Previous Month’s Worksheet (Note 13)  
Monthly HAP Emissions Total from the Previous Year’s Worksheet (Note 14)  
Current 12-Month Total HAP Emissions (Note 15)

Note 1: Unique identification of material used.  
Note 2: Weight percent of previously unidentified HAPs should be obtained from each material’s MSDS. If a range is given, then the highest value of that range should be used.  
Note 3: \((\text{Column E}) = (\text{Column C}) \times ((\text{Column D})/100) \times (0.0005)\)  
Note 4: \((\text{Column G}) = (\text{Column C}) \times ((\text{Column F})/100) \times (0.0004) \times (0.0005)\)  
Note 5: \((\text{Column H}) = (\text{Column E}) + (\text{Column G})\)  
Note 6: Sum of the percents of each HAP listed on the MSDS. If a range is given, then the highest value of that range should be used. Do not add toluene it has already been considered.  
Note 7: \((\text{Column H}) = (\text{Column C}) \times ((\text{Column D})/100) \times (0.005)\)  
Note 8: Obtained from the row in Attachment A entitled “Total Styrene Emissions from the Installation for this Month”.  
Note 9: Obtained from the row in Attachment B entitled “Total MMA Emissions from the Installation for this Month”.  
Note 10: Obtained from the row in Attachment C entitled “Total Toluene Emissions from the Installation for this Month”.  
Note 11: Obtained from the row in Attachment D entitled “Total Dimethyl Phthalate Emissions from the Installation for this Month”.  
Note 12: Sum of HAP emissions reported in Column H.  
Note 13: Running 12-month total of emissions from previous month’s worksheet.  
Note 14: Emissions reported for this month in the last calendar year.  
Note 15: Amount reported in Note 13 minus amount reported in Note 14 plus amount reported in Note 14.
Attachment F – VOC Compliance Worksheet

Kitco, Inc.
Johnson County, S19, T46N, R25W
Project Number: 2006-07-063
Installation ID Number: 101-0057
Permit Number:

This sheet covers the period from _________ to _________.

(month, year)     (month, year)

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions Point</td>
<td>Material ID (Note 1)</td>
<td>Amount Used (lbs)</td>
<td>Weight Percent VOC (Note 2)</td>
<td>Total VOC Emissions (tons) (Note 3)</td>
</tr>
<tr>
<td>EP-1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>EP-2</td>
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<tr>
<td>EP-4</td>
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<td>EP-5</td>
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<tr>
<td>EP-6</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>EP-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Styrene Emissions from Attachment A (Note 4)
Total Methyl Methacrylate Emissions from Attachment B (Note 5)
Total Dimethyl Phthalate Emissions from Attachment C (Note 6)
Total Toluene Emissions from Attachment D (Note 7)
Total of Column E (MEK) and Column G (those HAPs that are also VOCs) from Attachment E.
Total VOC Emissions from the Installation for this Month (Note 8)
12-Month VOC Emissions Total from the Previous Month’s Worksheet (Note 9)
Monthly VOC Emissions Total from the Previous Year’s Worksheet (Note 10)
Current 12-Month Total VOC Emissions (Note 11)

Note 1: Unique identification of material used.
Note 2: Weight percent should be obtained from each material’s MSDS. If a range is given, then the highest value of that range should be used.
Note 3: 
(Column E) = (Column C) • ((Column D)/100) • (0.0005)
Note 4: Obtained from the row in Attachment A entitled “Total Styrene Emissions from the Installation for this Month”.
Note 5: Obtained from the row in Attachment B entitled “Total MMA Emissions from the Installation for this Month”.
Note 6: Obtained from the row in Attachment C entitled “Total Dimethyl Phthalate Emissions from the Installation for this Month”.
Note 7: Obtained from the row in Attachment D entitled “Total Toluene Emissions from the Installation for this Month”.
Note 8: Sum of VOC emissions reported in Column E.
Note 9: Running 12-month total of emissions from previous month’s worksheet.
Note 10: Emissions reported for this month in the last calendar year.
Note 11: Amount reported for Note 9 minus amount reported for Note 10 plus amount reported for Note 9.
Mr. Thomas L. Boehmer  
President  
Kitco, Inc.  
P.O. Box 347  
Odessa, MO 64076

RE: New Source Review Permit - Project Number: 2006-07-063

Dear Mr. Boehmer:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, 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 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 have any questions regarding this permit, please do not hesitate to contact Tim Hines at the Department of Natural Resources’, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kyra L. Moore  
Permits Section Chief

KLM:thl

Enclosures

c: Kansas City Regional Office  
PAMS File 2006-07-063

     Permit Number: