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: 012008-004  Project Number: 2007-08-007

Parent Company: Koller Enterprises

Parent Company Address: 1400 South Old Highway 141, Fenton, MO 63026

Installation Name: Paramount Metalizing

Installation Address: 1005 North Service Road, Sullivan, MO 63080

Location Information: Crawford County, S1, T39, R2W

Application for Authority to Construct was made for:
A flow coat treatment machine rated at 2.89 pounds per hour. 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.

JAN 9 2008
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 devises 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 this (these) air contaminant sources(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 with 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 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.”_

Paramount Metalizing
Crawford County, Section, T39, R2W

1. Solvent and Cleaning Solutions
   Paramount Metalizing shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Paramount Metalizing shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used with this equipment.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2007-08-007
Installation ID Number: 055-0043
Permit Number:

Paramount Metalizing
1005 North Service Road
Sullivan, MO 63080

Parent Company:
Koller Enterprises
1400 South Old Highway 141
Fenton, MO 63026

Crawford County, Section, T39, R2W

REVIEW SUMMARY

- Paramount Metalizing has applied for authority to construct a dip/flow coating pretreatment system rated at 2.89 pounds per hour.

- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are Toluene (CAS# 108-88-3) and ethylene glycol (CAS#107-21-1).

- 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.

- 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 HAPs and VOC are below de minimis levels.

- This installation is located in Crawford 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 not performed since potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the equipment.

- A revision to the Intermediate Operating Permit application is required for this installation within 30 day of equipment startup.

- Approval of this permit is recommended with special conditions.

**INSTALLATION DESCRIPTION**

The installation specializes in the vacuum metalizing of plastic parts and has two (2) different processes for surface coating the plastic parts before the vacuum metalizing step. The first process is a Dip/Flow Coat process where plastic louvers for fluorescent light fixtures are received and a primer/base coat is applied to the parts. The second process is a Spray Coating operation for traffic light reflectors where a high volatile organic compounds (VOC) content lacquer/top coat is applied to the parts. The plastic parts from both processes are then sent to an electric oven then sent to a chamber where a vacuum is drawn and aluminum is applied to the plastic parts.

The following permits have been issued to Paramount Metalizing from the Air Pollution Control Program.

Table 1: Permit actions taken for Paramount Metalizing:

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Coating Operation (closed out per Policy) project number 1998-06-054</td>
</tr>
<tr>
<td>1298-015</td>
<td>Metallizing &amp; Painting Facility project number 1998-07-026</td>
</tr>
<tr>
<td>OP</td>
<td>Intermediate OP project number 2004-06017</td>
</tr>
<tr>
<td>052005-006</td>
<td>Add Paint robot project number 2005-01-066</td>
</tr>
<tr>
<td>072005-041</td>
<td>Temporary flow coat machine project number 2005-05-073</td>
</tr>
</tbody>
</table>

**PROJECT DESCRIPTION**

This project is making a temporary Dip/Flow Coat process as a permanent part of the installation. Paramount Metalizing has built a scaled down version of an existing dip/flow coating pretreatment system. Plastic parts are placed in frames with horizontal and vertical slats (louvers) and are are placed on a series of rollers, which bring the product under three bars with slots in them. The mix of Clear Flowcoat Base Coat and B8870 (solvent blend) flows through bars and onto the louvers in a waterfall effect. The emissions of concern for this project are from Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs).
EMISSIONS/CONTROLS EVALUATION

The potential emissions for this project were calculated using a mass balance approach with the VOC and HAP emission factors being determined from the annual solvent usage for the existing operations and the information about the amount of HAPS and VOCs found on the Material Safety Data sheets (MSDS) for Clear Flowcoat Base Coat and B8870. No other products were considered in this evaluation. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project. No control device was assumed in this determination of the Potential to emit for this project.

Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>267.68**</td>
<td>56.24</td>
<td>12.67</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>18.22***</td>
<td>1.14</td>
<td>0.49</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.37</td>
<td>N/A</td>
</tr>
<tr>
<td>Toluene</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.12</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined.
** The potential VOC emissions of the application were obtained from permit # 1298-015.
*** Potential HAP emissions were obtained from permit # 052005-006.

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 VOC and HAPs are below de minimis levels.

APPLICABLE REQUIREMENTS

Paramount Metalizing 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. For a complete list of applicable requirements for your installation, please consult your operating permit.
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.

• Operating Permits, 10 CSR 10-6.065

• 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

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.

________________
Timothy Paul Hines       Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

• The Application for Authority to Construct form, dated July 26, 2007, received July 31, 2007, designating Koller Enterprises as the owner and operator of the installation.


• Southeast Regional Office Site Survey.
Mr. David Koller  
Paramount Metalizing  
1005 North Service Road,  
Sullivan, MO 63080

RE: New Source Review Permit - Project Number: 2007-08-007

Dear Mr. Koller:

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 and with your amended operating permit 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 Timothy Paul Hines at the departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:thl

Enclosures

c: Southeast Regional Office  
PAMS File 2007-08-007  
Permit Number: