STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION

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 2011 - 003
Project Number: 2010-07-033
Installation Number: 157-0022

Parent Company: H & G Marine
Parent Company Address: 296 PCR 806, Perryville, Mo 63775
Installation Name: H & G Marine
Installation Address: 296 PCR 806, Perryville, Mo 63775
Location Information: Perry County, S35, T14, R10E

Application for Authority to Construct was made for:
Installation of two automatic reciprocating spray painting systems for painting navigational buoys. 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.

MAR 10 2011
EFFECTIVE DATE
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 Departments’ 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.”

H & G Marine
Perry County, S35, T14, R10E

1. Superseding Condition
   The conditions of this permit supersede all special conditions found in the previously issued construction permit 1189-009 issued by the Air Pollution Control Program.

2. Emission Limitation
   A. H & G Marine shall emit less than 40.0 tons of Volatile Organic Compounds (VOCs) in any consecutive 12-month period from the entire installation (see Table 2).

   B. H & G Marine shall emit less than 10.0 tons individually or 25.0 tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from the entire installation (see Table 2).

   C. Attachment A, Attachment B, and 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. and 2.B. Appendix A and B contain the VOC and HAP concentrations that were used to determine the potential emission calculations. These Appendices are provided for reference purposes only and the most recent MSDS should be used to obtain the most current VOC and HAP concentrations.

3. Operational Requirement
   H & G Marine shall keep the ink solvents and cleaning solutions in sealed containers whenever the materials are not in use. H & G Marine shall provide and maintain suitable, easily read, permanent markings on all inks, solvent and cleaning solution containers used with this equipment.

4. Record Keeping and Reporting Requirements
   A. H & G Marine 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
SPECIAL CONDITIONS:

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

records shall include Material Safety Data Sheets (MSDS) for all materials used.

B. H & G Marine 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 shows an exceedance of a limitation imposed by this permit.

C. H & G Marine shall submit a copy of the following records to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

1) By April 1st of 2012, H & G Marine shall submit Attachments A, B, and C for each month covering the time period between permit issuance through December 2011

2) By April 1st of 2013, H & G Marine shall submit Attachments A, B, and C for each month covering the time period between January 2012 through December 2012

3) By April 1st of 2014, H & G Marine shall submit Attachments A, B, and C for each month covering the time period between January 2013 through December 2013

4) By April 1st of 2015, H & G Marine shall submit Attachments A, B, and C for each month covering the time period between January 2014 through December 2014

5) By April 1st of 2016, H & G Marine shall submit Attachments A, B, and C for each month covering the time period between January 2015 through December 2015

D. For the time period covering January 2016 and later, H & G Marine shall keep copies of Attachments A, B, and C on-site and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request. These records shall be kept for not less than five years.
REVIEW SUMMARY

- H & G Marine has applied for the authority to install two automatic reciprocating spray painting systems (EU2A and EU2B) for the painting of navigational buoys.

- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are:
  - methyl isobutyl ketone (MIBK) or 4-methyl pentan-2-one (CAS# 108-10-1)
  - toluene (CAS# 108-88-3)
  - ethylbenzene (CAS# 100-41-4)
  - xylene (all isomers)
  - phenol (CAS# 108-95-2)

- None of the New Source Performance Standards (NSPS) apply to the installation.

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation.

- None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
  - 40 CFR 63, Subpart II, National Emission Standards for Shipbuilding and Ship Repair (Surface Coating), does not apply because H & G Marine is not a major source for HAPs.
  - 40 CFR 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, does not apply because none of the paints contain the target HAP.
• 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 all pollutants are conditioned to below de minimis levels.

• This installation is located in Perry 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 since potential emissions of the application are below de minimis levels.

• Emissions testing are not required for the equipment.

• No Operating Permit is required for this installation.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

H & G Marine is an existing manufacturer of large navigational buoys for the U.S. Coast Guard. Facility operations include metal buoy fabrication (stamping, punching, cutting, rolling, and welding), rigid polyurethane foam filling, shot blasting, painting (primer, base coat, acrylic coat), and drying. The following permits have been issued to H & G Marine from the Air Pollution Control Program.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1189-009</td>
<td>Spray Painting and Urethane Foam Filling</td>
</tr>
</tbody>
</table>

In December of 2010, H & G Marine was issued a Notice of Violation for exceeding their 1189-009 permit limits on gallons of paint and pounds of polyurethane foam. The facility was also cited for not maintaining monthly records as required by the permit. As a result, H & G Marine is required to submit their compliance worksheets for the next five years in order to verify that their compliance tracking procedures are adequate.

PROJECT DESCRIPTION

H & G Marine has made several improvements to their facility since their 1989 construction permit was issued. In 2006, the facility replaced the manual priming operation (EU-4A) with an automatic reciprocating painting system. In 2009, the facility replaced the manual base coat spray painting operation (EU-4B) with another automatic reciprocating painting system. Both of the reciprocating painting systems can be
equipped with a maximum of 4 high pressure automatic airless spray guns. Since H & G Marine should have obtained a construction permit prior to the start of construction for both of these additions, obtaining this construction permit is a retroactive requirement of the Air Pollution Control Program. Additionally, during the course of this permit review, H&G Marine constructed a home-made 96 cubic foot wood-fired boiler (EU-05) with an estimated maximum design rate of 1.4 million Btu per hour. Table 2 below contains a summary of the emission units that are installed as of the date of this permit.

Table 2: Entire Installation Emission Unit Summary

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Description</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>Metal Fabrication(stamping, punching, cutting, rolling, and welding)</td>
<td>1989</td>
</tr>
<tr>
<td>Existing</td>
<td>Shot Blasting/Sand Blasting</td>
<td>1989</td>
</tr>
<tr>
<td>Existing</td>
<td>Rigid Polyurethane Foam Filling</td>
<td>1989</td>
</tr>
<tr>
<td>New</td>
<td>Primer Application – Automatic Reciprocating Painting System</td>
<td>2006</td>
</tr>
<tr>
<td>New</td>
<td>Base Coat Application – Automatic Reciprocating Painting System</td>
<td>2009</td>
</tr>
<tr>
<td>Existing</td>
<td>Acrylic Application – Manual Spray Gun</td>
<td>1989</td>
</tr>
<tr>
<td>New</td>
<td>96 cubic foot wood-fired boiler</td>
<td>2010</td>
</tr>
</tbody>
</table>

1Beginning with the 2011 reporting year, the emission unit IDs listed in Table 2 should be used for reporting emissions on the Emission Inventory Questionnaire (EIQ).

The facility processes operate in series. The following maximum design rates were provided by H & G Marine: the metal fabrication and foam filling processes can produce 7.5 buoys per hour, the primer, base coat, and acrylic coat applications can each produce 15 buoys per hour, and the drying/curing room can produce 1.88 buoys per hour. The drying/curing step is the bottleneck for the entire facility as each buoy requires 5 days (120 hours) for the paint to cure and the drying conveyor can hold a maximum of 225 buoys.

EMISSIONS/CONTROLS EVALUATION

Potential emissions of VOCs from the new reciprocating spray paint systems (EU-4A and EU-4B) were calculated using a mass balance approach and assuming 100% emitted. A maximum design rate of 225 buoys per 5 day drying period (1.88 buoys per hour) was provided by the applicant. The maximum application rates were determined to be 0.32 gallons mixed primer per large buoy (EU-4A) and 0.41 gallons mixed base coat per large buoy (EU-4B). The epoxy primer and the epoxy base coat are mixtures of a resin, curing agent, and thinner. Potential VOC and HAP emissions are expected from cleaning the spray guns. However, H & G Marine cleans the spray guns with the paint thinner and recycles the thinner back into the paint mix. Therefore, potential emissions associated with cleaning were incorporated into the potential emissions of the painting activities (EU-4A and EU-4B).

Potential emissions of particulate matter less than 10 microns and 2.5 microns in
diameter (PM$_{10}$) and (PM$_{2.5}$) were calculated using a mass balance approach and assuming a 25% overspray according to EPA's APTI Course 482 (November 2002), *Sources and Control of Volatile Organic Air Pollutants*. PM$_{2.5}$ was assumed to be 9.92% of total PM and PM$_{10}$ was assumed to be 40.70% of total PM based on the particle size distribution obtained from *The Annals of Occupational Hygiene*, “Size Distribution and Speciation of Chromium in Paint Spray Aerosol at an Aerospace Facility”, R. A. Sabty-Daily et al. (Vol. 49, No. 1, pp. 47–59, 2005). The painting operations are not performed in a paint booth and no filters are used to control particulate emissions.

Potential emissions associated with the wood-fired boiler (EU-05) were included in the potential emissions calculations of the 2009 Project. The boiler has no emission controls and the emission factors were obtained from AP-42, Section 1.6 “Wood Residue Combustion in Boilers” (September 2003). 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.

Table 3: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>N/D</td>
<td>0</td>
<td>0.94</td>
<td>2.686</td>
<td>N/A</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/D</td>
<td>0.16</td>
<td>3.86</td>
<td>6.528</td>
<td>N/A</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/D</td>
<td>0</td>
<td>N/A</td>
<td>0.153</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/D</td>
<td>0</td>
<td>N/A</td>
<td>1.343</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>&lt;7.9</td>
<td>14.51</td>
<td>8.32</td>
<td>11.931</td>
<td>&lt;40.0</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/D</td>
<td>0</td>
<td>N/A</td>
<td>3.663</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>10</td>
<td>N/D</td>
<td>0</td>
<td>0.42</td>
<td>0.52</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>MIBK</td>
<td>10</td>
<td>N/D</td>
<td>7.04</td>
<td>2.21</td>
<td>3.32</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Toluene</td>
<td>10</td>
<td>N/D</td>
<td>4.02</td>
<td>0.14</td>
<td>0.88</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Phenol</td>
<td>0.1</td>
<td>N/D</td>
<td>0</td>
<td>0.063</td>
<td>0.076</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Xylene</td>
<td>10</td>
<td>N/D</td>
<td>2.04</td>
<td>2.09</td>
<td>2.59</td>
<td>&lt;10.0</td>
</tr>
<tr>
<td>Combined HAPs</td>
<td>25.0</td>
<td>N/D</td>
<td>13.1</td>
<td>9.98</td>
<td>7.536</td>
<td>&lt;25.0</td>
</tr>
</tbody>
</table>

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

$^1$For Individual HAPs, the value corresponds to the Screening Model Action Level.

$^2$Existing potential emissions obtained from permit number 1189-009. VOC limit is calculated from an indirect limit on the usage of paint and urethane foam.

**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 all pollutants are conditioned to below de minimis levels.

APPLICABLE REQUIREMENTS

H & G Marine 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 June 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 10-6.165

SPECIFIC REQUIREMENTS

- Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060. According to the rule, a wood-fired boiler rated at less than 10 million Btus per hour must have a particulate emission rate less than 0.6 pound per mmBtu. According to AP-42, Section 1.6 “Wood Residue Combustion in Boilers” (September 2003) the emission factor for wood-fired boilers is 0.33 pound per mmBtu, therefore the boiler is in compliance with the rule.

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.

Kathi Jantz  
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 9, 2010, received July 16, 2010, designating H & G Marine as the owner and operator of the installation.
- Southeast Regional Office Site Survey, dated October 25, 2010.
Appendix A – VOC Density and Percent Content

H&G Marine
Perry County, S35, T14, R10E
Project Number: 2010-07-033
Installation ID Number: 157-0022
Permit Number: 

This sheet contains the density and % contents of the raw materials used at the time of permitting. These values should be used in the Attachment A: Monthly VOC Compliance Worksheet.

<table>
<thead>
<tr>
<th>Material Used (Name)</th>
<th>Density (Pounds per Gallon)</th>
<th>VOC Content (Weight %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foam Part A, Product Code: SP</td>
<td>N/A</td>
<td>0%</td>
</tr>
<tr>
<td>Foam Part B, Polyurethane Base</td>
<td>9.096</td>
<td>5%</td>
</tr>
<tr>
<td>Primer, AT370-23</td>
<td>15.61</td>
<td>17.41%</td>
</tr>
<tr>
<td>Base Coat Red, AT370-701</td>
<td>14.69</td>
<td>17.98%</td>
</tr>
<tr>
<td>Base Coat Green, AT370-503</td>
<td>15.36</td>
<td>17.82%</td>
</tr>
<tr>
<td>370 Cure, AT370-B</td>
<td>7.84</td>
<td>19.13%</td>
</tr>
<tr>
<td>Acrylic Red, AT229T3B</td>
<td>9.6</td>
<td>31.41%</td>
</tr>
<tr>
<td>Acrylic Green, AT229T3A</td>
<td>9.6</td>
<td>31.41%</td>
</tr>
<tr>
<td>229 Cure, AT229B</td>
<td>7.68</td>
<td>55.89%</td>
</tr>
<tr>
<td>accelerator, AT861/16</td>
<td>N/A</td>
<td>0%</td>
</tr>
<tr>
<td>Thinner, ST-0441</td>
<td>6.97</td>
<td>100%</td>
</tr>
</tbody>
</table>

Include other materials below:
Appendix B – Individual HAP Density and Percent Content

H&G Marine  
Perry County, S35, T14, R10E  
Project Number: 2010-07-033  
Installation ID Number: 157-0022  
Permit Number: _______

This sheet contains the density and the percent by weight of all individual HAP used at the time of permitting. These values should be used in the Attachment B: Monthly Individual HAP Compliance Worksheet.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual HAP</td>
<td>CAS Number</td>
<td>Material Used (Name)</td>
<td>Density (Pounds per Gallon)</td>
<td>HAP Content (Weight %)</td>
</tr>
<tr>
<td>MIBK</td>
<td>108-10-1</td>
<td>Primer, AT370-23</td>
<td>15.61</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base Coat Red, AT370-701</td>
<td>14.69</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base Coat Green, AT370-503</td>
<td>15.36</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thinner, ST-0441</td>
<td>6.97</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Thinner, ST-0441</td>
<td>6.97</td>
<td>60%</td>
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<tr>
<td></td>
<td></td>
<td>Others…</td>
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<tr>
<td>Xylene</td>
<td></td>
<td>Primer, AT370-23</td>
<td>15.61</td>
<td>5%</td>
</tr>
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<td></td>
<td>Base Coat Red, AT370-701</td>
<td>14.69</td>
<td>5%</td>
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<tr>
<td></td>
<td></td>
<td>Base Coat Green, AT370-503</td>
<td>15.36</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acrylic Red, AT229T3B</td>
<td>9.6</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acrylic Green, AT229T3A</td>
<td>9.6</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>229 Cure, AT229B</td>
<td>7.68</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>Base Coat Red, AT370-701</td>
<td>14.69</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base Coat Green, AT370-503</td>
<td>15.36</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primer, AT370-23</td>
<td>15.61</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>229 Cure, AT229B</td>
<td>7.68</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>370 Cure, AT370-B</td>
<td>7.84</td>
<td>1.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>229 Cure, AT229B</td>
<td>7.68</td>
<td>1%</td>
</tr>
<tr>
<td>Manganese</td>
<td></td>
<td>Welding Wire (Bohler EMK 8)</td>
<td>N/A</td>
<td>1.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others…</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Include other HAPs below:
Attachment A – Monthly VOC Compliance Worksheet

H&G Marine  
Perry County, S35, T14, R10E  
Project Number: 2010-07-033  
Installation ID Number: 157-0022  
Permit Number: ________

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

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 4</th>
<th>Column 5 (a)</th>
<th>Column 6 (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Used (Name)</td>
<td>Amount of Material Used (Include Units)</td>
<td>Density (Pounds per Gallon)</td>
<td>VOC Content (Weight %)</td>
<td>VOC Emissions (Tons)</td>
</tr>
</tbody>
</table>

(c) Total VOC Emissions Calculated for this Month in Tons:

(d) Last Month’s 12-Month VOC Emissions Total, in Tons:

(e) Previous Year’s Monthly VOC Emissions Total, in Tons:

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

Instructions: This worksheet must include VOC emissions from all emission units installed or permitted at the time of permit issuance.

(a) VOC content should be obtained from the Material Safety Data Sheet (MSDS). If the content is given as a range, then the maximum value should be used.

(b) 1) If usage is in tons - [Column 2] x [Column 5] = [Column 6];  
    2) If usage is in pounds - [Column 2] x [Column 5] x [0.0005] = [Column 6];  
    3) If usage is in gallons - [Column 2] x [Column 4] x [Column 5] x [0.0005] = [Column 6];

(c) Summation of [Column 6] in Tons;

(d) 12-Month VOC emissions (f) from last month's Attachment A in Tons;

(e) Monthly VOC emissions total (c) from the previous year's Attachment A in Tons; and

(f) Calculate the new 12-month VOC emissions total. A 12-Month VOC emissions total (f) of less than 40.0 tons indicates compliance.
Attachment B – Monthly Individual HAP Compliance Worksheet

H&G Marine
Perry County, S35, T14, R10E
Project Number: 2010-07-033
Installation ID Number: 157-0022
Permit Number: ______

HAP Name: ___________________________ CAS No.: ____________

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

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Used (Name)</td>
<td>Amount of Material Used (Include Units)</td>
<td>Density (Pounds per Gallon)</td>
<td>HAP Content (Weight %)</td>
<td>HAP Emissions (Tons)</td>
</tr>
<tr>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d)</td>
<td>(e)</td>
</tr>
</tbody>
</table>

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

(d) Last Month’s 12-Month Individual HAP Emissions Total, in Tons:

(e) Previous Year’s Monthly Individual HAP Emissions Total, in Tons:

(f) Calculate the new 12-month Total of Individual HAP Emissions in Tons: [(c) + (d) - (e)]

Note: Potential emissions of HAP associated with the wood-fired boiler (EU-05) are considered insignificant for recordkeeping purposes at a maximum potential of 0.013 tons HAP per month. Therefore, HAP emissions associated with the boiler do not need to be included in the recordkeeping.

Instructions: This worksheet must include HAP emissions from all emission units installed or permitted at the time of permit issuance. Complete a new worksheet for each individual HAP.

(a) HAP content should be obtained from the Material Safety Data Sheet (MSDS) and should represent the total mass of the HAP compound by weight. If the content is given as a range, then the maximum value should be used.

(b) 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];

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

(d) 12-Month Individual HAP emissions (f) from last month’s Attachment B in Tons;

(e) Monthly Individual HAP emissions total (c) from the previous year’s Attachment B in Tons; and

(f) Calculate the new 12-month Individual HAP emissions total. A 12-Month Individual HAP emissions total (f) of less than 10.0 tons for each individual HAP indicates compliance.
## Attachment C - Monthly Combined HAPs Tracking Record

H&G Marine  
Perry County, S35, T14, R10E  
Project Number: 2010-07-033  
Installation ID Number: 157-0022  
Permit Number: 

This sheet covers the month of _________________ in the year _______________.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3 (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual HAP Name</td>
<td>Individual HAP CAS number</td>
<td>Total Individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monthly HAP emissions (tons)</td>
</tr>
<tr>
<td>MIBK</td>
<td>108-10-1</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td></td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td></td>
</tr>
<tr>
<td>Xylene (All Isomers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td></td>
</tr>
<tr>
<td>Manganese (All Compounds)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(c) Previous Month’s 12-Month HAP Emissions Total, in Tons:

(d) Previous Year’s Monthly HAP Emissions Total, in Tons:

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

Note: Potential emissions of MDI (CAS 101-68-8) due to polyurethane foam filling (EU-03) are considered insignificant at a maximum potential emission of 1.8E-7 tons per year and do not need to be included on this sheet.

Instructions: This worksheet must include HAP emissions from all emission units installed or permitted at the time of permit issuance. Obtain information for Column 1 and Column 2 and Column 3 from Attachment B  
(a) Record the total monthly individual HAP emissions total from (c) from the current month’s Attachment B  
(b) Summation of [Column 3] in Tons;  
(c) Record the previous 12-Month combined HAP emission total (e) from last month’s Attachment C, in Tons;  
(d) Record the monthly HAP emission total (b) from previously year's Attachment C, in Tons; and  
(e) Calculate the new 12-month combined HAP emissions total. A 12-Month Combined HAP emissions total (e) of less than 25.0 tons indicates compliance.
Mr. Mark Gibbar  
President  
H & G Marine  
P.O. Box 192  
Perryville, Mo 63775  

RE: New Source Review Permit - Project Number: 2010-07-033  

Dear Mr. Gibbar:  

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 Kathi Jantz, at the Departments' 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  

Kendall B. Hale  
New Source Review Unit Chief  

KBH:kjl  

Enclosures  

c: Southeast Regional Office  
PAMS File: 2010-07-033  

Permit Number: