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: 11 2008 - 010  Project Number: 2008-07-088
Parent Company: The Holland Group, Inc.
Parent Company Address: 467 Ottawa Ave., Holland, MI 49422
Installation Name: Holland USA - Warrenton
Installation Address: 101 South Main Street, Warrenton, MO 63383
Location Information: Warren County, S29, T47N, R2W

Application for Authority to Construct was made for:

The installation of equipment for a new metals preparation and coating process. 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.

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 departments’ 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 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 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.”

Holland USA - Warrenton
Warrenton County, S29, T47N, R2W

1. Holland USA - Warrenton shall keep all chemicals (i.e. solvents, cleaners, etc.) used in the metals preparation and coating process in sealed containers whenever the chemicals are not in use. Holland USA - Warrenton shall provide and maintain suitable, easily read, permanent markings on all chemical containers used with the equipment.

2. HAPs Emission Limitations
   A. Holland USA - Warrenton Facility shall emit less than ten (10.0) tons individually or twenty-five (25.0) tons combined of Hazardous Air Pollutants (HAPs) from the entire installation in any consecutive 12-month rolling average period.

   B. Attachment A and Attachment B or equivalent forms shall be used to demonstrate compliance with Special Condition 2.A. The records must include each individual HAP identified on the Material Safety Data Sheet (MSDS) for the HAP containing products in use in the entire installation. The total of the individual HAPs must add up to the total combined HAPs. Holland USA - Warrenton Facility 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 MSDS for all materials used.

   C. Holland USA - Warrenton Facility shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2.B. indicate that the source exceeds the limitation of Special Condition Number 2.A.
SPECIAL CONDITIONS:

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

3. Use of Alternative Coatings/Paints for the Metals Preparation and Coating Process
   A. When considering using an alternative material for the metals preparation and coating process that is different than a material listed in the Application for Authority to Construct, Holland USA – Warrenton Facility must calculate the potential emissions of volatile organic compounds (VOCs) and each individual HAP in the alternative material.

   B. Holland USA – Warrenton Facility must seek approval from the Air Pollution Control Program before use of the alternative material in the following cases:
      (1) If the potential VOC emissions for the alternative material is equal to or greater than 20.86 ton per year, or
      (2) If the potential emissions of each individual HAP for the alternative material is equal to or greater than its respective Screen Modeling Action Levels (SMAL), for any HAP with SMAL less than ten (10) tons per year. A list of current SMAL values can be obtained by contacting the Air Pollution Control Program.

   C. Attachment C or equivalent forms shall be used to show compliance with Special Condition 2.A through 2.B. Holland USA – Warrenton Facility shall maintain all records required by this permit for not less than five (5) years and shall make them immediately available to any Missouri Department of Natural Resources’ personnel upon request. These records shall include MSDS for all alternative material used.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW  
Project Number: 2008-07-088  
Installation ID Number: 219-0013  
Permit Number:  

Holland USA - Warrenton  
101 South Main Street  
Warrenton, MO 63383  

Parent Company:  
The Holland Group, Inc.  
467 Ottawa Ave.  
Holland, MI 49422  

Warrenton County, S29, T47N, R2W

REVIEW SUMMARY

- Holland USA - Warrenton has applied for authority to construct equipment for a new metals preparation and coating process.

- Hazardous Air Pollutant (HAP) emissions are expected from the combustion of natural gas.

- 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 MMMM, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, of the MACT does not apply to this source because this source is not a major source for HAPs.

- 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 below de minimis levels.

- This installation is located in Warren 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 modification to the facility’s intermediate operating permit application is required within 90 days of equipment startup

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

The installation manufactures tractor trailer components. For construction permitting purposes, the installation has always been considered a minor source. After the issuance of this permit, the unconditioned potential VOC emissions would increase to greater than 250 tons per year. For operating permits, the installation was considered a part 70 major source until the company submitted an application in November 2006 to change its status to an intermediate source (Project 2006-11-081). In January 2008, the installation submitted an amendment (Project 2008-01-014) to the intermediate operating permit application that was submitted in November 2006. As of the writing of this permit, the intermediate operating permit has not been issued.

The following construction permits have been issued to Holland USA - Warrenton from the Air Pollution Control Program.

Table 1: Previous Permits Issued to Site 219-0013

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0893-027</td>
<td>Installation of a paint spray booth.</td>
</tr>
<tr>
<td>0296-003</td>
<td>Installation of a new paint line and associated equipment.</td>
</tr>
<tr>
<td>0296-003A</td>
<td>Add installation-wide HAPs limit.</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

The installation proposes to install a new metals coating operation (EP37) that consists of a dip tank coating process and a pneumatic coating process. The two (2) processes are designed to operate individually or concurrently depending on production requirements. The raw material to be coated includes assembled metal axles, spindles and other metal parts. The flow of parts into the coatings process is limited by a conveyor speed of one (1) part every two (2) minutes (thirty (30) parts per hour). The parts will be coated with a water-based anticorrosive and then conveyed through a 2.0 MMBTU/hr natural gas-fired drying oven. After curing, the parts will be sent to a cool down area and then a touch-up area where more coatings will be applied as required. The metal parts will then be assembled and stored as final product.
An organic metals preparation process will be used to clean the metal parts before they are coated. The preparation process employs mild acids and oil-eating micro-organisms to remove dirt and contaminants from the metal parts. Two other natural-gas fired ovens (a drying oven and a washer oven) will also be installed. Both of these ovens are rated 1.5 MMBTU/hr. No control devices will be used to control emissions from the equipment.

In addition to the installation of the coatings operations, the facility also proposes to relocate a vac-u-paint system, previous permitted in permit 0296-003, to another location at the site. Ambient impact modeling was performed on Methanol, Toluene and Xylene in permit 0296-003, but the vac-u-paint system does not use any paints or solvents that contain these HAPs. Therefore, a new ambient modeling analysis is not required. If the installation ever decides to switch to using chemicals with methanol, toluene or xylene in the vac-u-paint system, it shall submit modeling results to the Air Pollution Control Program to show that the ambient impact of methanol, toluene or xylene from the installation is below their respective Risk Assessment Levels (RALs). Table 2 gives a list of current RALs for each of these pollutants. Due to the possibility that the RALs may change, the installation should contact the Air Pollution Control Program for an updated list of RALs when needed.

Table 2: Risk Assessment Levels

<table>
<thead>
<tr>
<th>HAPs</th>
<th>24-hr RAL (µg/m³)</th>
<th>Annual RAL (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>600</td>
<td>7.13</td>
</tr>
<tr>
<td>Toluene</td>
<td>400</td>
<td>20</td>
</tr>
<tr>
<td>Xylene</td>
<td>250</td>
<td>11.8</td>
</tr>
</tbody>
</table>

EMISSIONS/CONTROLS EVALUATION

The facility is expected to use 12.1 gallons of coatings per day. This is calculated from a mass balance approach using a maximum of thirty (30) parts coated in one (1) hour, the maximum amount needed to coat one part (0.33 gallons) and adding a 10% factor for the touchup process and 10% factor as a safety margin. Total VOC emissions from the coatings were calculated using this maximum hourly usage rate, assuming that the VOC content of the coatings is 5% (taken from the MSDS) and assuming that 100% of the VOCs are emitted. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year.)

Emissions from the combustion of natural gas were calculated using emission factors from the Environmental Protection Agency (EPA) document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 1.4 (7/98). None of the chemicals used by the metals cleaning process contain HAPs or VOCs, according to the MSDS for these chemicals. Bioprep HP, an acidic chemical used in the metal preparation process, does contain sodium fluoride and fluorides are regulated pollutants with de minimis level of three (3) tons per year. Hydrogen Fluoride (HF), a HAP, can also result from reactions of fluoride with moisture in the air. However, due to the small
percentage (0.8-1.0 wt. %) of fluoride contained in Bioprep HP and the stability of sodium fluoride in acidic solution, the fluoride and hydrogen fluoride emissions should be negligible.

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>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>9.47</td>
<td>0.64</td>
<td>0.42</td>
<td>N/A</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>0.08</td>
<td>N/D</td>
<td>0.03</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>12.75</td>
<td>N/D</td>
<td>5.58</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>249.97</td>
<td>20.16</td>
<td>20.86</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>1.99</td>
<td>N/D</td>
<td>4.69</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>0.04</td>
<td>0.10</td>
<td>&lt;10.0/25.0</td>
</tr>
</tbody>
</table>

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

**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 below de minimis levels.

**APPLICABLE REQUIREMENTS**

Holland USA - Warrenton 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 June 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 ofVisible Air Contaminants*, 10 CSR 10-6.220

- *Restriction of Emission of Odors*, 10 CSR 10-3.090
SPECIFIC REQUIREMENTS

- Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060

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.

________________________________________
Chia-Wei Young Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 16, 2008, received July 24, 2008, designating The Holland Group, Inc. as the owner and operator of the installation.


Attachment A: Monthly Combined HAPs Tracking Record
Holland USA - Warrenton Facility
Warren County, S29, T47N, R2W
Project Number: 2008-07-088
Installation ID Number: 219-0013
Permit Number:

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

Copy this sheet as needed.

<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, HAP CAS #)</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></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other HAP Sources

<table>
<thead>
<tr>
<th>Type of HAP (Name, CAS #)</th>
<th>Fuel Usage (mmscf)</th>
<th>Emission Factors (lbs/mmscf)</th>
<th>HAP Emissions (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Combustion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

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

Instructions: Choose appropriate HAP 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];
4) Fuel combustion - [Column 3] x [Column 4] ÷ 2,000 = [Column 5];

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

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

(d) Monthly HAP emissions total (b) from the previous year's Attachment A in Tons; and

(e) Calculate the new 12-month combined HAPs emissions total.

A 12-Month HAP emissions total (e) of less than 25 tons for the installation indicates compliance.
### Attachment B: Monthly Individual HAPs Tracking Record

Holland USA - Warrenton Facility  
Warren County, S29, T47N, R2W  
Project Number: 2008-07-088  
Installation ID Number: 219-0013

**Permit Number:**

- **HAP Name:** ____________________________  
- **CAS No.:** ____________________________

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

Copy this sheet as needed.

<table>
<thead>
<tr>
<th>Column 1 (a)</th>
<th>Column 2 (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>List materials from Attachment A which emit this specific HAP (Name, Type)</td>
<td>HAP emissions from Attachment A [Column 5] (in Tons)</td>
</tr>
</tbody>
</table>

(c) Total HAP Emissions Calculated for this Month, in Tons:  
(d) 12-Month HAP Emissions Total (f) from Previous Month's Attachment B, in Tons:  
(e) Monthly HAP Emissions Total (c) from Previous Year's Attachment B, in Tons:  
(f) Current 12-month Total of HAP Emissions in Tons: [(c) + (d) - (e)]:

**Instructions:** Choose appropriate HAP calculation method for units reported

(a) Individually list each material which emits this specific HAP from this installation;  
(b) Record the amount of HAP emissions already calculated for Attachment A 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 B, in Tons;  
(e) Record the monthly HAP emission total (c) from previous year's Attachment B, in Tons; and Calculate the new 12-month individual HAP emissions total.  
(f) A 12-Month individual HAP emissions total of less than ten (10.0) tons for the installation indicates compliance.
Attachment C – Hazardous Air Pollutants (HAP) and Volatile Organic Compounds (VOC) Calculation Sheet
Holland USA - Warrenton Facility
Warren County, S29, T47N, R2W
Project Number: 2008-07-088
Installation ID Number: 219-0013
Permit Number:

Date: ________________

Copy this sheet as needed.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6 (a)</th>
<th>Column 7 (b) (c)</th>
<th>Column 8</th>
<th>Column 9 (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Used (Name, Type)</td>
<td>HAP Name and CAS #:</td>
<td>Application Rate (Gallons per hour)</td>
<td>Density (Pounds per gallon)</td>
<td>Individual HAP Content (Weight %)</td>
<td>Individual /Total HAP Emissions (Tons per Year)</td>
<td>Screen Modeling Action Level (Tons per Year)</td>
<td>VOC Content (Weight %)</td>
<td>VOC Emissions (Ton per Year) for the Material</td>
</tr>
<tr>
<td>Example, paint ABC</td>
<td>Glycol Ether</td>
<td>0.98</td>
<td>12.34</td>
<td>4</td>
<td>2.12</td>
<td>5</td>
<td>32</td>
<td>16.74</td>
</tr>
</tbody>
</table>

**Instructions:** Calculate the potential emissions of each individual HAP contained in the material

a) \([\text{Column 3}] \times [\text{Column 4}] \times [\text{Column 5}] \times [4.38] / 100 = [\text{Column 6}]\).

b) Screen Modeling Action Levels for individual HAPs can be obtained from the Air Pollution Control Program.

c) If [Column 6] is greater than [Column 7], obtain permission from Air Pollution Control program before using this material.

d) \([\text{Column 3}] \times [\text{Column 4}] \times [\text{Column 8}] \times [4.38] / 100 = [\text{Column 9}]\)

    If [Column 9] is greater than 20.86 tons per year, obtain permission from Air Pollution Control program before using this material.
Mr. Chuck Steinkamp  
Manufacturing Engineer  
Holland USA – Warrenton  
101 South Main Street  
Warrenton, MO 63383  

RE: New Source Review Permit - Project Number: 2008-07-088  

Dear Mr. Steinkamp:  

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 Chia-Wei Young, 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:cwyk  

Enclosures  
c: St. Louis Regional Office  
PAMS File: 2008-07-088  

Permit Number: