

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

P & H Manufacturing  
Attn: Joe Woodall  
604 South Lodge  
Shelbyville, Illinois 62565

<u>Application No.:</u> 02090068	<u>I.D. No.:</u> 173030AAC
<u>Applicant's Designation:</u>	<u>Date Received:</u> August 27, 2002
<u>Subject:</u> Welding and Coating	
<u>Date Issued:</u> April 28, 2003	<u>Expiration Date:</u> April 28, 2008
<u>Location:</u> 604 South Lodge, Shelbyville	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of four (4) paint booths with particulate filters, one (1) dip tank, and fifty (50) welding booths pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM), 10 tons/year for any single hazardous air pollutant (HAP), and 25 tons/year for all HAPs combined). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. Emissions of VOM and operation of the four (4) paint booths and one (1) dip tank shall not exceed the following limits:

<u>VOM Usage</u>		<u>VOM Emissions</u>	
<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
16.0	97.0	16.0	97.0

These limits define the potential emissions of VOM and are based on maximum coating, solvent, and additive usages, and maximum VOM content. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

- Pursuant to 35 Ill. Adm. Code 215.204(j) and (k), the types of coatings applied in the four (4) paint booths and one (1) dip tank shall not exceed the following lb VOM/gallon of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator:

<u>Coating</u>	<u>VOM Content (Lb VOM/Gal)</u>
Extreme Performance	3.5
Extreme Performance Top Coat Air Dried	4.3

- Emissions and operation of the welding operations shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Welding Wire</u>		<u>PM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Welding	360	2,155	2.0	11.22

These limits are based on standard emission factors (Table 12.19-1 of AP-42) and the maximum annual throughput. Compliance with annual limits shall be determined from a running total of 12 months of data.

- This permit is issued based on negligible emissions of particulate matter (PM) from the paint booths. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- Emissions and operation of the natural gas combustion units shall not exceed the following limits:

<u>Natural Gas Usage (mmft<sup>3</sup>/Year)</u>	<u>Emission Factor (Lb/mmft<sup>3</sup>)</u>	<u>VOM Emissions (Tons/Year)</u>
160	5.5	0.44

These limits are based on standard emission factors (Table 1.4-1 of AP-42) and the maximum annual usage. Compliance with annual limits shall be determined from a running total of 12 months of data.

- The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.
- In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw

material or installation of controls, in order to eliminate the odor nuisance.

9. The Permittee shall maintain monthly records of the following items:

- a. Amount of each coating, solvent, and additive used on all flow coaters (tons/month and tons/year);
- b. VOM and HAP content of each coating, solvent, and additive used on all flow coaters (lb VOM/gallon or weight percent);
- c. Calculations of VOM emissions. The following equations shall be used to calculate VOM emissions:

$$Te = \sum_{i=1}^n A_i B_i$$

Where:

Te = Total VOM emissions from all coating lines each month in units of lbs/month or tons/month;

n = Number of different coatings, solvent, and additive as applied each month on all coating lines;

i = Subscript denoting an individual coating, solvent, and additive;

A<sub>i</sub> = Weight of VOM per volume of each coating, solvent, and additive as applied each month on all coating lines in units of lbs VOM/gallon; and

B<sub>i</sub> = Volume of each coating, solvent and additive as applied each month on all coating lines in units of gallons/month.

- d. Calculations of each individual HAP emissions for painting and welding operations;
- e. Welding wire usage (tons/month and tons/year); and
- f. Natural gas usage (mmft<sup>3</sup>/month and mmft<sup>3</sup>/year).

10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: coating, solvent and additive usage, coating, solvent and additive VOM content and HAP weight percent, welding wire usage, and calculations of VOM and HAP emissions from the prior calendar year. If there has been no exceedance of a requirement of this permit during the prior calendar year, the annual emission report shall contain a statement to that effect.

It should be noted that the following operations are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146.

<u>Operation</u>	<u>35 Ill. Adm. Code 201.146( )</u>
Cutting	aa
Grinding	aa
Machining	aa
Shot Blasting	aa
Soap Storage	n
Propane Fueled Trucks	e

Page 5

If you have any questions on this, please call Ross Cooper at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RWC:jar

cc: Illinois EPA, FOS Region 3  
Illinois EPA, Compliance Section  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coating and welding operation operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. Emissions of VOM and operation of the four (4) paint booths and one (1) dip tank:

<u>VOM Usage</u>		<u>VOM Emissions</u>	
<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
16.0	97.0	16.0	97.0

This table defines the potential emissions of VOM and are based on maximum coating, solvent, and additive usages, and maximum VOM content.

2. Emissions and operation of the welding operations:

<u>Item of Equipment</u>	<u>Welding Wire</u>		<u>PM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Welding	360	2,155	2.0	11.22

This table defines the potential PM emission and is based on standard emission factors (Table 12.19-1 of AP-42) and the maximum annual throughput.

3. This permit is issued based on negligible emissions of particulate matter (PM) from the paint booths. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
4. Emissions and operation of the natural gas combustion units shall not exceed the following limits:

<u>Natural Gas Usage</u>	<u>Emission Factor</u>	<u>VOM Emissions</u>
<u>(mmft<sup>3</sup>/Year)</u>	<u>(Lb/mmft<sup>3</sup>)</u>	<u>(Tons/Year)</u>
160	5.5	0.44

This table defines the potential VOM emissions and is based on standard emission factors (Table 1.4-1 of AP-42) and the maximum annual usage.

5. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.

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