

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Henry Pratt Company
Attn: Mr. Jay Morse, Manager
401 South Highland Avenue
Aurora, Illinois 60506

Application No.: 74030107

I.D. No.: 089005ABB

Applicant's Designation: VALVEPLANT

Date Received: April 11, 2003

Subject: Valve Manufacturing Facility

Date Issued:

Expiration Date:

Location: 401 South Highland Avenue, Aurora

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two paint booths, equipment cleaning, rubber molding operation, soil vapor extraction system, plasma spray system with baghouse, sandblaster with baghouse, three natural gas-fired boilers (2.52, 7.9 and 7.9 mmBtu/hour), three natural gas-fired preheat ovens (0.175, 0.175 and 0.1 mmBtu/hour), and burn-off oven (0.08 mmBtu/hour) with afterburner (0.08 mmBtu/hour) 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., 25 tons/year of volatile organic materials (VOM), 10 tons/year of any single hazardous air pollutant (HAP), and 25 tons/year of combined HAPs). 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.
- 2a. Total combined emissions of VOM from the two paint booths and equipment cleaning operations shall not exceed 2.0 tons/month and 19.2 tons/year. Total emissions of combined HAPs (xylene, toluene, ethylbenzene, etc.) from these emission sources shall not exceed 1.7 tons/month and 17.0 tons/year. These emissions shall be determined from the following equation on a monthly basis:

$$E = \sum(M_i \times V_i) / 2000 - \sum(W_j \times V_j);$$

Where

E - VOM emissions (tons);

M_i - Usage of each VOM-containing material (coatings, thinners, cleaning solvents, etc., in gallons);

V_i - VOM content of each material (lb/gallon);

W_i - Certified weight of each waste shipment (tons);

V_j - Certified VOM content of each waste shipment (wt. %)

These limits are based on submitted material usage and emissions data. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of the rubber molding operation shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Emissions</u>		<u>HAPs Emissions (MIBK, MEK and Formaldehyde)</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Primer	55	550	0.2	1.7	0.2	1.7
Adhesive	50	485	<u>0.2</u>	<u>1.5</u>	<u>0.2</u>	<u>1.5</u>
		Totals	0.4	3.2	0.4	3.2

These limits are based on maximum material usage, VOM content (6.0 lb/gallon), HAPs content (6.0 lb/gallon) and 100% emission. Compliance with annual limits shall be determined from a running total of 12 months of data.

- c. Emissions of VOM (and HAPs) from the soil vapor extraction system shall not exceed 0.2 tons/month and 1.9 tons/year. These limits are based on the maximum operating hours (8,760 hours/year) and 1.5 times the maximum VOM emission rate (0.28 lb/hour).
- d. The particulate matter (PM) emissions of the plasma spray system shall not exceed 1.1 tons/month and 10.2 tons/year. These limits are based on the maximum operating hours (8,760 hours/year) and 1.5 times the maximum PM emission rate (1.543 lb/hour).
- e. The PM emissions of the sandblaster with baghouse shall not exceed 1.3 tons/month and 12.7 tons/year. These limits are based on the maximum operating hours (8,760 hours/year) and 1.5 times the maximum PM emission rate (1.929 lb/hour).
- f. This permit is issued based on negligible emissions of PM from the burn-off oven with afterburner. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- g. Emissions and operation of the natural gas-fired ovens, boilers, and burn-off oven with afterburner (combined) shall not exceed the following limits:

- c. The burn-off oven shall be equipped with an afterburner temperature indicator.
7. In the event that the operation of these emission units 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.
8. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
9. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
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
9511 West Harrison
Des Plaines, Illinois 60016

13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. Total natural gas usage (mmscf/year); and
 - b. Total VOM, single HAP, and combined HAPs emissions (tons/year).

It should be noted that, regarding the soil vapor extraction system, issuance of this permit does not relieve the Permittee from compliance with the 35 Ill. Adm. Code Part 731 Underground Storage Tanks or the permit requirements of Section 21 and 39 of the Environmental Protection Act with respect to a waste management operation, nor does it constitute a release from further responsibility for preventive or corrective action as defined under Section 4(y) of the Environmental Protection Act. Pursuant to 35 Ill. Adm. Code Part 731, approval may be required from the Bureau of Land - Leaking Underground Storage Tank Section (217/782-6761) prior to the installation of this equipment.

It should be noted that the total permitted VOM emissions from this facility are 2.7 tons/month and 24.8 tons/year. The total permitted emissions of combined HAPs from this facility are 2.2 tons/month and 21.9 tons/year.

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

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

DES:JDK:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the valve manufacturing facility 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., 25 tons/year of volatile organic materials (VOM), 10 tons/year of any single hazardous air pollutant (HAP), and 25 tons/year of combined HAPs 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.

- 1a. Total combined emissions of VOM from the two paint booths and equipment cleaning operations are not expected to exceed 2.0 tons/month and 19.2 tons/year.
- b. Emissions and operation of the rubber molding operation are not expected to exceed the following:

<u>Material</u>	<u>Usage</u>		<u>VOM Emissions</u>	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Primer	55	550	0.2	1.7
Adhesive	50	485	<u>0.2</u>	<u>1.5</u>
		Totals	0.4	3.2

The emissions of VOM are based on maximum material usage, VOM content (6.0 lb/gallon), and 100% emission.

- c. Emissions of VOM from the soil vapor extraction system are not expected to exceed 0.2 tons/month and 1.9 tons/year. The emissions of VOM are based on the maximum operating hours (8,760 hours/year) and the maximum VOM emission rate (0.28 lb/hour).
- d. The particulate matter (PM) emissions of the plasma spray system are not expected to exceed 1.1 tons/month and 10.2 tons/year. The emissions of PM are based on the maximum operating hours (8,760 hours/year) and the maximum PM emission rate (1.543 lb/hour).
- e. The PM emissions of the sandblaster with baghouse are not expected to exceed 1.3 tons/month and 12.7 tons/year. The emissions of PM are based on the maximum operating hours (8,760 hours/year) and the maximum PM emission rate (1.929 lb/hour).
- f. The PM emissions of the burn-off oven with afterburner are not expected to exceed 0.1 lb/hour and 0.44 ton/year.
- g. Emissions and operation of the natural gas-fired ovens, boilers, and afterburner (combined) are not expected to exceed the following:

<u>Pollutant</u>	Natural Gas Usage		Emissions	
	<u>(mmscf/Month)</u>	<u>(mmscf/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
	17	170		
			<u>Emission Factor</u> <u>(Lb/mmscf)</u>	
Nitrogen Oxides (NO _x)			100	8.5
Carbon Monoxide (CO)			84	7.2
Particulate Matter (PM)			7.6	0.7
Volatile Organic Material (VOM)			5.5	0.5
			Totals	16.9

The emissions are based on the maximum total firing rate (18.93 mmBtu/hour), maximum operating hours (8,760 hours/year), and standard AP-42 emission factors.

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