

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Henry Pratt Company
Attn: Michael R. Sweeney
401 South Highland Avenue
Aurora, Illinois 60506

Application No.: 74030107

I.D. No.: 089005ABB

Applicant's Designation: VALVEPLANT

Date Received: January 25, 2012

Subject: Valve Manufacturing Facility

Date Issued: April 23, 2012

Expiration Date: April 8, 2016

Location: 401 South Highland Avenue and 641 Archer Avenue, Aurora, Kane County

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 filters, equipment cleaning, rubber molding operation, rubber seat area, plasma spray system with baghouse, three (3) natural gas-fired boilers (2.52, 7.9 and 7.9 mmBtu/hour), three (3) natural gas-fired preheat ovens (0.175, 0.175 and 0.1 mmBtu/hour), Rubber Seat Area, and Paint Mixing Shed comprised of a paint mixing system and a solvent recovery unit 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:
 - i. 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 any combination of such HAPs). As a result, the source is excluded from the requirements 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.
 - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart Mmmm.
 - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission

Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing, 40 CFR 63, Subpart HHHHH.

- b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- d. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- e. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- f. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the

Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

- g. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- h. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- i. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 3a. Pursuant to 35 Ill. Adm. Code 218.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is

equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108.

- b. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b) (2).

- c. Pursuant to 35 Ill. Adm. Code 218.204(j), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for Miscellaneous Metal Parts and Products coating. Except as otherwise provided in 35 Ill. Adm. Code 218.204(a), (c), (g), (h), (j), (l), (n), (p), and (q), compliance with the emission limitations is required on and after March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

Prior to May 1, 2012: Miscellaneous Metal Parts and Products Coating		<u>kg/l</u>	<u>lb/gal</u>
i.	Clear coating	0.52	(4.3)
ii.	Extreme performance coating		
	A. Air dried	0.42	(3.5)
	B. Baked	0.40	(3.3)
iii.	All other coatings		
	A. Air Dried	0.40	(3.3)
	B. Baked	0.34	(2.8)

		kg/l	lb/gal
iv.	Metallic Coating		
	A. Air Dried	0.42	(3.5)
	B. Baked	0.36	(3.0)
d.	<p>Pursuant to 35 Ill. Adm. Code 218.204(q) (1), on and after May 1, 2012, the owner or operator of a miscellaneous metal or plastic parts coating line shall comply with the limitations in 35 Ill. Adm. Code 218.204(q). The limitations in 35 Ill. Adm. Code 218.204(q) shall not apply to aerosol coating products, powder coatings, or primer sealants and ejection cartridge sealants used in ammunition manufacturing. Primer sealants and ejection cartridge sealants shall instead be regulated under 35 Ill. Adm. Code 218 Subpart TT. For purposes of 35 Ill. Adm. Code 218.204(q) (1), "corrosion resistant basecoat" means a water-borne epoxy coating applied via an electrodeposition process to a metal surface prior to spray coating, for the purpose of enhancing corrosion resistance. The limitations in 35 Ill. Adm. Code 218.204(q) (1) shall not apply to stencil coats, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating. The limitations in 35 Ill. Adm. Code 218.219, however, shall apply to these coatings unless specifically excluded in 35 Ill. Adm. Code 218.219.</p>		
		kg/l (lb/gal)	kg/l (lb/gal)
i.	General one component coating		
	A. Air dried	0.34 (2.8)	0.54 (4.52)
	B. Baked	0.28 (2.3)	0.40 (3.35)
ii.	General multi-component coating		
	A. Air dried	0.34 (2.8)	0.54 (4.52)
	B. Baked	0.28 (2.3)	0.40 (3.35)
iii.	Extreme performance coating		
	A. Air dried	0.42	0.80

		kg/l (lb/gal) coatings (3.5)	kg/l (lb/gal) solids (6.67)
	B. Baked	0.36 (3.0)	0.61 (5.06)
iv.	Metallic coating		
	A. Air dried	0.42 (3.5)	0.80 (6.67)
	B. Baked	0.36 (3.0)	0.61 (5.06)
v.	Repair coats and touch-up coatings		
	A. Air dried	0.42 (3.5)	
	B. Baked	0.36 (3.01)	
vi.	All other coatings		
	A. Air dried	0.40 (3.3)	0.73 (5.98)
	B. Baked	0.34 (2.8) 0.40	0.54 (4.52) 0.73
e.	Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.		
4a.	This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM. This is result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.		

- b. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing, 40 CFR 63, Subpart HHHHH. This is result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
 - c. This permit is issued based upon the paint mixing shed not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Paints and Allied Products Manufacturing, 40 CFR 63, Subpart CCCCCC. The paint mixing shed will not process, use, or generate materials containing HAP, as defined in 40 CFR 63.11607.
 - d. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63 Subpart HHHHHH, because the source is not involved in the spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
5. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 6a. Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- b. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(A)(iii), notwithstanding 35 Ill. Adm. Code 218.187(a)(1), the stripping of cured coatings, inks, or adhesives shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g);
 - c. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B)(x), notwithstanding 35 Ill. Adm. Code 218.187(a)(1) cleaning operations within the miscellaneous metal parts coating source category shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (f), and (g).

- d. Pursuant to 35 Ill. Adm. Code 218.208(d), prior to May 1, 2012, the limitations of 35 Ill. Adm. Code 218 Subpart F shall not apply to touch-up and repair coatings used by a coating source described by 35 Ill. Adm. Code 218.204(j), (n), and (o), provided that the source-wide volume of the coatings used does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling 12 month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with 35 Ill. Adm. Code 218.208(e).
- e. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- f. This permit is issued based on the paint mixing system not being subject to 35 Ill. Adm. Code 218 Subpart AA (Paint and Ink Manufacturing). Pursuant to 35 Ill. Adm. Code 218.620(b), 35 Ill. Adm. Code 218 Subpart AA shall also apply to all paint and ink manufacturing sources which:
 - i. Have the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from process emission units that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB, or
 - ii. Produce more than 1,892,705 l (500,000 gal) per calendar year of paint or ink formulations which contain less than 10% (by weight) water, and ink formulations not containing as the primary solvents water, Magie oil or glycol.
- g. This permit is issued based on the rubber molding operation not being subject to 35 Ill. Adm. Code 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes). Pursuant to 35 Ill. Adm. Code 218.920(b) (1) (A), a source is subject to 35 Ill. Adm. Code 218 Subpart PP if it has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from emission units that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB.
- h. This permit is issued based on the paint mixing system not being subject to 35 Ill. Adm. Code 218 Subpart QQ (Miscellaneous Formulation Manufacturing Process). Pursuant to 35 Ill. Adm. Code 218.940(b) (1) (A), a source is subject to 35 Ill. Adm. Code 218 Subpart QQ if it has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from emission units that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB.
- i. This permit is issued based on the Solvent Recovery Unit not being subject 35 Ill. Adm. Code 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(b) (1) (A), a source is subject to

35 Ill. Adm. Code 218 Subpart TT (Other Emission Units) if it has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from emission units, other than furnaces at glass container manufacturing sources and VOM leaks from components, that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T, (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB.

7a. Pursuant to 35 Ill. Adm. Code 218.219(b), except as provided in 35 Ill. Adm. Code 218.219(c), every owner or operator of a coating line described in 35 Ill. Adm. Code 218.204(q) shall:

- i. Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;
- ii. Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- iii. Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;
- iv. Convey VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes;
- v. Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and
- vi. Apply all coatings using one or more of the following application methods:
 - A. Electrostatic spray;
 - B. High volume low pressure (HVLP) spray;
 - C. Flow coating. For the purposes of 35 Ill. Adm. Code 218.219(b) (6) (C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - D. Roll coating;
 - E. Dip coating, including electrodeposition. For purposes of 35 Ill. Adm. Code 218.219(b) (6) (E), electrodeposition means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;

- F. Airless spray;
 - G. Air-assisted airless spray; or
 - H. Another coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Illinois EPA.
- 8a. In the event that the operation of this source 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.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse associated with the plasma spray system and the paint booth filters such that the baghouse and paint booth filters are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
 - c. The boilers and preheat ovens shall only be operated with natural gas as the fuel. The use of any other fuel in the boilers and preheat ovens requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 9a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
 - c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS

provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.

10a. Emissions from and operation of the four paint booths, and equipment cleaning operations shall not exceed the following limits:

i. VOM Emissions:

VOM Usage		VOM Emissions	
<u>Ton/Month</u>	<u>Tons/Year</u>	<u>Ton/Month</u>	<u>Tons/Year</u>
1.92	19.20	1.92	19.20

ii. HAP Emissions (e.g., xylene, toluene, ethylbenzene, etc.):

Single HAP Usage		Combined HAP Usage		Single HAP Emissions		Combined HAP Emissions	
<u>Ton/Mo</u>	<u>Ton/Yr</u>	<u>Ton/Mo</u>	<u>Ton/Yr</u>	<u>Ton/Mo</u>	<u>Ton/Yr</u>	<u>Ton/Mo</u>	<u>Ton/Yr</u>
0.25	2.51	1.70	17.00	0.25	2.51	1.70	17.00

iii. These limits are based on the maximum material usage, the maximum VOM and HAP content of the materials, and the maximum emissions determined by a material balance. Emissions of VOM and HAPs shall be determined from the following equation:

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

Where:

E = VOM or HAP usage and emissions (tons);

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

d_i = Density of of each material (lb/gallon);

V_i = VOM or HAP content of each material (% by Weight);

W_i = Certified weight of each waste shipment (tons); and

V_j = Certified VOM or HAP content of each waste shipment (% by Weight)

b. This permit is issued based on negligible emissions of particulate matter (PM) from the paint spray booths. For this purpose, emissions of PM from all such emission units shall not exceed nominal rates of 0.1 lb/hour and 0.44 tons/year.

c. 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 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	0.2	1.5	0.2	1.5
		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.

- d. The particulate matter (PM) emissions from 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 lbs/hour).
- e. Emissions and operation of the natural gas-fired ovens, and boilers (combined) shall not exceed the following limits:

- i. Natural Gas Usage:

<u>(mmscf/Month)</u>	<u>(mmscf/Year)</u>
17	170

- ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor (lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Nitrogen Oxides (NO _x)	100	0.85	8.50
Carbon Monoxide (CO)	84	0.71	7.14
Particulate Matter (PM)	7.6	0.06	0.65
Sulfur Dioxide (SO ₂)	0.6	0.01	0.05
Volatile Organic Material (VOM)	5.5	0.05	0.47

These limits are based on the maximum total firing rate (19.37 mmBtu/hour), maximum operating hours (8,760 hours/year), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- f. This permit is issued based on negligible emissions of VOM and HAPs (e.g., xylene) from the rubber seat area. For this purpose, emissions of each pollutant shall not exceed nominal rates of 0.1 lb/hour and 0.44 tons/year.
- g. Emissions and operation of the paint mixing system shall not exceed the following limits:

<u>Paint Production</u>		<u>VOM and HAP Emissions</u>		
<u>Ton/Mo</u>	<u>Ton/Yr</u>	<u>lb/Ton</u>	<u>Ton/Mo</u>	<u>Ton/Yr</u>
6.72	67.16	30	0.10	1.01

These limits are based on the maximum raw material paint production (222 gallons/week), the maximum material density of the paint ingredients, and standard emission factors (Table 6.4-1, AP 42, Fifth Edition, Volume I, May 1983).

- h. This permit is issued based on negligible emissions of VOM and HAPs from the solvent recovery unit. For this purpose, emissions of each pollutant shall not exceed nominal rates of 0.1 lb/hour and 0.44 tons/year.
 - i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Conditions 12 and 13 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
12. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the

applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

13. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
14. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
15. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 16a. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 218.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel

with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

- b. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating as applied on each coating line;
 - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
 - iii. For coating lines subject to the limitations of 35 Ill. Adm. Code 218.204(q), the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating.
 - c. Pursuant to 35 Ill. Adm. Code 218.211(h)(3), on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 218.219 shall comply with the following: Maintain at the source all records required by 35 Ill. Adm. Code 218.211(h) for a minimum of three years from the date the document was created and make those records available to the Illinois EPA upon request.
- 17a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the baghouse associated with the plasma spray system and the paint booth filters:
 - A. Records for periodic inspection of the baghouse associated with the plasma spray system and the paint booth filters with date, individual performing the inspection, and nature of inspection; and

- B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Usage of each VOM and HAP-containing material (coatings, thinners, cleaning solvents, etc.), (gallons/month and gallons/year);
 - iii. Density of each material (lb/gallon);
 - iv. VOM and HAP content of each material (% by Weight);
 - v. Certified weight of each waste shipment (tons);
 - vi. Certified VOM and HAP content of each waste shipment (% by Weight);
 - vii. Natural gas consumption (ft³/month and ft³/year); and
 - viii. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAP from the source (tons/month and tons/year) with supporting calculations.
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
- i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) 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 storage device) 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.

18. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 19a. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:
 - i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
 - ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), as applicable. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), as applicable.
- b. Pursuant to 35 Ill. Adm. Code 218.211(h)(2), on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 218.219 shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.219 by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation.
- c. Pursuant to 35 Ill. Adm. Code 218.637(a), upon request by the Illinois EPA, the owner or operator of an emission source which claims to be exempt from the requirements of 35 Ill. Adm. Code 218 Subpart AA shall submit records to the Illinois EPA within 30 calendar days from the date of the request which document that the emission source is in fact exempt from 35 Ill. Adm. Code 218 Subpart AA. These records shall include (but are not limited to) the percent water (by weight) in the paint or ink being produced and the quantity of Magie oil, glycol and other solvents in the ink being produced.
- d. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA

within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.

20a. If there is an exceedance of or a deviation from 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 or deviation. 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 deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications 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

It should also be noted that this permit has been revised so as to include the operation of the equipment described in Construction Permit 12010043.

If you have any questions on this, please call Jocelyn Stakely at 217/785-1705.

Edwin C. Bakowski P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:JRS:jws

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., 100 tons/year of VOM) 10 tons/year of any single HAP, and 25 tons/year of combination of such 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.

<u>Equipment</u>	E M I S S I O N S (Tons/Year)						Total HAPs (T/Yr)
	CO (T/Yr)	NO _x (T/Yr)	PM (T/Yr)	SO ₂ T/Yr)	VOM (T/Yr)	Single HAP (T/Yr)	
Four paint booths and equipment cleaning operations			0.44		19.20	2.51	17.00
Rubber molding operation					3.20	3.20	3.20
Plasma spray system			10.20				
Natural gas-fired ovens and boilers (combined)	7.14	8.50	0.65	0.05	0.47		
Rubber seat area					0.44	0.44	0.44
Paint Mixing System					1.01	1.01	1.01
Solvent Recovery Unit	--	--	--	--	0.44	0.44	0.44
Totals:	7.14	8.50	11.29	0.05	24.76	7.60	22.09