

Department #5 (Parco Lubrite):	Miscellaneous Processes:
Cleaner Tank #5-1 (Cold Degreaser)	Zinc Stripper Tank ZS-1295-297
Alkaline Tank #5-3	Acid Cleaning Tank ZS-3
Conditioner Tank #5-5	Oil Cleaning Tank ZS-4
Manganese Phosphate Tank #5-6	Ovens 01, 02 and 03
Sealer Tank #5-9	Sludge Dryer SD1
Oil Coating Tanks #5-10, -12, -13	Boiler #1 and #2
	Make-Up Air Units
Department #6 (Zinc Barrel):	
Alkaline Cleaner Tank #6-2	
Electro-Cleaner Tank #6-4	
Acid Cleaning Tank #6-6	
Zinc Electroplating Tanks #6-8, -9	
Brightener Tanks #6-12, -30	
Lacquer Tank #6-24	

* Controlled with scrubber

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 for VOM, 10 tons/year for a single HAP and 25 tons/year of the total HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program 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 permit(s) for this location.
2. Emissions and operation of all hydrochloric acid (HCl) storage and cleaning tanks and HCl emission from the entire facility shall not exceed the following limits:

<u>Hydrogen Chloride Usage</u>		<u>Emission Factor</u>	<u>HCl Emission</u>	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>	<u>(%)</u>	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
16.4	197.0	3	0.5	6.0

These limits are based on the maximum production rate, the highest HCl concentration in the cleaning tanks not exceeding 10% and the tanks operations at room temperature. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

- 3a. The metal coating operations are subject to and shall comply with the volatile organic materials (VOM) emission limitations of 35 Ill. Adm. Code 218.204(j)(4)(A): VOM content of the coating shall not exceed 3.3 lb/gal.
- b. Emissions and operation of the coating tanks shall not exceed the following limits:

<u>Tank Designation (Material Used)</u>	<u>VOM Content (Lb/Gal)</u>	<u>Usage (Gal/Mo)(Gal/Yr)</u>		<u>VOM Emissions (Lb/Mo)(Ton/Yr)</u>	
1-8 (Sealer)	0.78	340	2,547	265	1.0
2-10, 2-11 (Oil)	0.015	1,310	9,800	20	0.1
3-14, 4-7, 5-10, ZS-4,					
9-14 (Oil)	0.38	5,190	38,947	1,972	7.4
3-19 (Oil)	0.37	485	3,675	180	0.7
5-12 (Oil)	2.89	100	180	289	0.3
5-13 (Oil)	0.35	200	800	70	0.1
3-15 (Chromate)	2.02	200	1,455	404	1.5
3-16 (Carbon Black)	1.29	200	837	258	0.5
6-24 (Lacquer)	0.21	100	100	21	0.01
				<u>21</u>	<u>0.01</u>
				Total	11.6

These limits are based on the maximum production rate and the highest VOM content of the coatings. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

- 4a. The cold degreaser (Tank #5-1) shall be operated according to the operating, equipment and material requirements of 35 Ill. Adm. Code 218.182.
- b. Emission and operation of the degreaser shall not exceed the following limits:

<u>Solvent Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
<u>(Gal/Month)</u>	<u>(Gal/Year)</u>	<u>(Lb/Gal)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
760	5,680	1.13	0.4	3.2

These limits are based on the maximum production rate. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

5. The VOM emissions from the use of VOM-containing additives in the process tanks shall not exceed 3.9 tons/year. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.
6. Emissions and operation of the all natural gas combustion sources shall not exceed the following limits:

Natural Gas Usage: 38 mmscf/Mo, 455 mmscf/Yr

<u>Pollutant</u>	<u>Emission Factor</u> (lb/mmscf)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	1.9	22.8
Carbon Monoxide (CO)	84	1.6	19.1
Particulate Matter (PM)	7.6	0.1	1.7
Volatile Organic Materials (VOM)	5.5	0.1	1.3

These limits are based on the maximum equipment firing rate and standard emission factors given by AP-42. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

7. The Permittee shall maintain monthly records of the following items:
 - a. Hydrochloric acid usage (ton/month and ton/year) and its concentration (%);
 - b. The name, identification number and amount used (gal/mo and gal/yr) of each coating and its VOM content (lb/gal);
 - c. Degreasing solvent usage (gal/mo and gal/yr) and its VOM content (lb/gal); and
 - d. Natural gas usage (mmscf/mo and mmscf/yr).

8. 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 and 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 the Illinois EPA request for records during the course of a source inspection.

9. 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 record keeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.

10. This permit is issued based on negligible emissions of particulate matter from processing tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.05 lb/hour and 0.22 ton/year from each tank.

- 11a. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emission Report, due May 1st of each year:
- i. Hydrochloric acid usage (ton/month and ton/year).
 - ii. Coatings, solvents and VOM-containing additives usage (gal/month and gal/year).
- b. If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.
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 and Enforcement 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

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

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

DES:VJB:psj

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

ATTACHMENT A

This attachment provides a summary of the maximum emission from the Metal Finishing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. The total coating and solvent usage are limited the potential to emit of VOM and HAP below major source thresholds. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM, 10 tons per year of any single HAP and 25 tons per year of a combination of all 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 material is handled, and control measures are more effective than required in this permit.

1. Emissions and operation of all hydrochloric acid (HCl) storage and cleaning tanks from the entire facility shall not exceed the following limits:

<u>Hydrogen Chloride Usage</u>		<u>Emission Factor</u>	<u>HCl Emission</u>	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>	<u>(%)</u>	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
16.4	197.0	3	0.5	6.0

2. Emissions and operation of the coating tanks shall not exceed the following limits:

<u>Tank Designation</u> <u>(Material Used)</u>	<u>VOM Content</u> <u>(Lb/Gal)</u>	<u>Usage</u>		<u>VOM Emissions</u>	
		<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
1-8 (Sealer)	0.78	340	2,547	265	1.0
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3-16 (Carbon Black)	1.29	200	837	258	0.5
6-24 (Lacquer)	0.21	100	100	21	0.01
				<u>21</u>	<u>0.01</u>
				Total	11.6

3. Emission and operation of the degreaser shall not exceed the following limits:

<u>Solvent Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
<u>(Gal/Month)</u>	<u>(Gal/Year)</u>	<u>(Lb/Gal)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
760	5,680	1.13	0.4	3.2

4. The VOM emissions from the use of VOM-containing additives in the process tanks shall not exceed 3.9 tons/year.

5. Emissions and operation of the all natural gas combustion sources shall not exceed the following limits:

Natural Gas Usage: 38 mmscf/Mo, 455 mmscf/Yr

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/mmscf)</u>	<u>Emissions</u> <u>(Ton/Mo) (Ton/Yr)</u>	
Nitrogen Oxides (NO _x)	100	1.9	22.8
Carbon Monoxide (CO)	84	1.6	19.1
Particulate Matter (PM)	7.6	0.1	1.7
Volatile Organic Materials (VOM)	5.5	0.1	1.3

6. This permit is issued based on negligible emission of particulate matter from processing tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.05 lb/hour and 0.22 ton/year from each tank.

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