

- b. Boilers, furnaces and gas generator:

Natural Gas Usage: 25 mmscf/mo, 250 mmscf/yr

<u>Pollutant</u>	<u>Emission Factors</u> (lb/mmscf)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	1.3	12.5
Carbon Monoxide (CO)	84	1.1	10.5
Particulate Matter (PM)	7.6	0.1	1.0
Volatile Organic Materials (VOM)	5.5	0.07	0.7

These limits define the potential emissions and are based on the standard emission factors given by AP-42 for the boiler, furnaces and gas generator and FIRE 6.2 for the engine and sulphur content of the diesel fuel of 0.4%. Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

- 3a. The volatile organic material (VOM) content of the coatings as applied at the coating lines shall not exceed 3.3 lb/gal of coating (minus water and exempt compounds which are specifically exempted from the definition of VOM) pursuant to 35 Ill. Adm. Code 218.204(j)(4)(A).
- b. The VOM emissions from three coating lines shall not exceed 3.7 ton/mo and 7.5 ton/yr. The emissions shall be determined from the following equation:

$$E = 3(Ct_i \times C_i) + 3(S_j \times C_j)$$

Where:

- E - VOM Emissions (lb)
- Ct_i - Coating Usage (gal)
- C_i - VOM Content of the Coating (lb/gal)
- S_j - Clean-Up Solvent Usage (gal)
- C_j - VOM Content of the Solvent (lb/gal)

4. This permit is issued based on negligible emissions of particulate matter from the zinc plating line. For this purpose emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

5. The Permittee shall maintain monthly records of the following items:
 - a. Natural gas usage (mmscf/month and mmscf/year);
 - b. Diesel fuel usage (gal/month and gal/year); and
 - c. Names and amounts of coatings used (gal/mo, gal/yr) and their VOM content.
6. All records and logs required by this permit shall be completed by the last day of the month following the reported month and 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 the Illinois EPA or USEPA request for records during the course of a source inspection.
7. 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 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.
8. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year:
 - a. Natural gas usage (mmscf/year);
 - b. Diesel fuel usage (gallons/year); and
 - c. Coatings usage and their VOM content (gal/yr and lb/gal).
9. 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 regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 First Avenue
Maywood, Illinois 60153

This permit has been revised to update a list of heat treating furnaces and delete the metal surface finishing equipment eligible for exemption from state permit requirements pursuant to 35 Ill. Adm. Code 201.146(aa). This revision does not relax monitoring, recordkeeping, or reporting requirements contained in federally enforceable conditions of this permit. These permit conditions assure that this source would not be a major source for purpose of CAAPP.

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:jar

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 heat treating plant 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 source. This is combustion of 250 mmscf of natural gas and 210,000 gallons of diesel fuel per year. The resulting maximum emissions are well below 100 tons per year of NO_x 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. Operation and emissions of the fuel combustion equipment:

a. Diesel engine: Fuel Usage: 42,000 gal/mo, 210,000 gal/yr

<u>Pollutant</u>	<u>Emission Factors</u> (lb/10 ³ gal)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	425	8.9	44.6
Carbon Monoxide (CO)	111	2.3	11.7
Sulfur Dioxide (SO ₂)	55	1.2	5.8
Volatile Organic Materials (VOM)	13.7	0.3	1.4
Particulate Matter (PM)	9.5	0.2	1.0

b. Boilers, furnaces and gas generator:

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Volatile Organic Materials (VOM)	5.5	0.07	0.7

2. The VOM emissions from two coating lines shall not exceed 3.7 ton/mo and 7.5 ton/yr.

3. This permit is issued based on negligible emissions of particulate matter from the zinc plating line. For this purpose emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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