

These limits are based on maximum operations (i.e., operating hours).

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

<u>Operation</u>	<u>Coating Limit (Lb VOM/Gal)</u>	<u>Painting Usage</u>		<u>VOM Emissions</u>	
		<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Painting*	3.5	686	6,857	2,400	12.0

These limits are based on the requested usages and allowable coating limit pursuant to 215.204(j).

* Clean-up solvent is also used as a reducer for the paint. Included in the total VOM emissions (lb/month and tons/year) are emissions from the clean-up solvent.

- c. For the purpose of this permit it shall be assumed that all the solvent in the paint (including all additional solvents) and coolant which are purchased are emitted.
 - d. 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.
4. 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.
- 5a. The Permittee shall maintain records of the following items:
- i. Coolant Usage (tons/month and tons/year).
 - ii. Paint Usage (gallon/month and gallons/year).
 - iii. Clean-up Solvents Usage (gallon/month and gallon/year).
 - iv. VOM content of materials used (lb VOM/gallon).
 - v. HAP content of materials used (lb VOM/gallon).
- b. 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.

6. 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.
7. 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

8. Emissions and operation of equipment shall not exceed the following limits:

<u>Item Of Equipment</u>	<u>Operating Hours (Hour/Yr)</u>	<u>Iron Powder Usage (Tons/Month)</u>	<u>Particulate Emissions (Lb/Month)</u>	<u>Emissions (Ton/Yr)</u>
Iron Powder Mixing	8,760	100	100.0	0.5
Iron Powder Preparation (Chopping, Sifting and Lubricating)	8,760	100	100.0	0.5

These limits are based on the information provided in the permit application.

- 9a. Emissions and operation of equipment shall not exceed the following limits:

<u>Operation</u>	<u>Operating ours (Hour/Year)</u>	<u>E M I S S I O N S</u>			
		<u>NO_x (Lb/Hr) (Ton/Yr)</u>	<u>CO (Lb/Hr) (Ton/Yr)</u>		
Natural Gas Combustion	8,760	0.10	0.44	0.084	0.368

These limits are based on the information provided in the permit application.

- b. Natural gas shall be the only fuel combusted in the equipment covered by this permit. Use of any other fuel will require revision of this permit.
- 10a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
 - b. For each fabric filter, the Permittee shall, at a minimum, perform internal and external inspections, twice each year. Permittee shall inspect for leaks, holes, seals, wear, and other problems, and promptly repair all problems found.
 - c. The Permittee shall maintain operating and maintenance logs for all control equipment, including: operating data, with pressure drop and stack condition, on daily startup and every twenty-four hours thereafter.
- 11. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year, from the prior calendar year:
 - i. Coolant usages (tons/month and tons/year).
 - ii. Paint Usage (gallon/month and gallons/year).
 - iii. Clean-up Solvents Usage (gallon/month and gallon/year).
 - iv. VOM content of materials used (lb VOM/gallon).
 - v. HAP content of materials used (lb HAP/gallon).
- 12. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line of the emission source, pursuant to 35 Ill Adm. Code 212.301.
- 13. 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 nuisance.

Page 5

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

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

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cc: IEPA, FOS Region 3
IEPA, FOS - CMU
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the source 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.

1a. Volatile Organic Emissions from the iron powder core manufacturing plant:

<u>Operation</u>	<u>Operating Limit</u>	<u>VOM Emissions</u>	
		<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Coolant Usage *	8,760 Hours/Year	1.3	10.0
Coatings Usage **	686 Gal/Mon & 6857 Gal/Yr	1.2	12.0

* The coolant is comprised of two primary parts: an aliphatic hydrocarbon and a metal-working fluid which is primarily oil.

** The coatings include thinners and clean-up solvents.

b. Hazardous Air Pollutant Emissions from the iron powder core manufacturing plant:

<u>Operation</u>	<u>Operating Limit</u>	<u>HAP Emissions</u>	
		<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Coatings Usage **	686 Gal/Mon & 6857 Gal/Yr	0.9	8.5

** The coatings include thinners and clean-up solvents used.

c. Particulate Matter Emissions from the iron powder core manufacturing plant:

<u>Operation</u>	<u>Operating Limit</u>	<u>Emissions</u>	
		<u>(Lb/Month)</u>	<u>(Ton/Year)</u>
Iron Powder Mixing	100 tons/month	100	0.5
Iron Powder Preparation (Chopping, Sifting, and Lubricating)	100 tons/month	100	0.5
Core Grinding	N/A	73	0.44

d. NO_x and CO Emissions from the iron powder core manufacturing plant from all natural gas combustion sources are considered negligible.

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Attachment B - List of Permitted Equipment

Mixing (powder and acetone and phosphatizing solution); 8 mixers and 3 powder drying ovens.

Chopping, sifting and lubricating; controlled by a baghouse.

Core grinding.

Natural gas combustion (4 curing ovens).

Painting; two booths.

Coolant (a mixture of aliphatic hydrocarbon and a metalworking fluid which is primarily oil).

Sludge drying oven.

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