

These limits define the potential emissions of VOM and are based on maximum material usage and emission factors as established by the facility and manufacturer. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 3. This permit is issued based on negligible emissions of particulate matter from the 125 injection molding machines. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 4a. Emissions from the nine generators shall not exceed the following limits:

	Per Generator		
	<u>(Hp)</u>		<u>(Hours/Year)</u>
	1,085		4,888
	Emission Factor		Emissions
<u>Pollutant</u>	<u>(Lb/Hp-Hour)</u>	<u>(Lb/Hour)</u>	<u>(Tons/Year)</u>
NO _x	0.0018	17.55	42.96
CO	0.004	39.06	95.46
PM	0.00004	0.45	1.05
VOM	0.00012	1.17	2.86

These limits define the actual emissions of NO_x, CO, PM, and VOM and are based on manufacturers data, maximum power capacity of 1,085 hp for each generator, and maximum annual operation of 4,888 hours for each generator. 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.

- b. Natural gas shall be the only fuel combusted in the generators. Use of any other fuel requires a permit revision.
- 5a. Fuel combustion emissions and operation of the heater and ovens shall not exceed the following limits:

	Usage			Emission Factor		Emissions	
<u>Material</u>	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>Pollutant</u>	<u>(Lb/mmscf)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	
Natural Gas	7.5	75	NO _x	100	0.38	3.8	
			CO	84	0.32	3.2	
			PM	1.9	0.03	0.3	
			SO ₂	0.6	0.01	0.02	
			VOM	5.5	0.02	0.2	

These limits define the actual emissions of NO_x, CO, PM, SO₂, and VOM and are based on maximum material usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel combusted in the heaters and oven. Use of any other fuel requires a permit revision.
6. This permit is issued based on negligible emissions of volatile organic material (VOM) from the screw conveyor cleaning oven. For this purpose, emissions shall not exceed nominal emission rates of 2.0 lb/hour and 0.55 ton/year.
7. This permit is issued based on negligible emissions of particulate matter from the screw conveyor cleaning oven. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
8. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.
9. The Permittee shall maintain records of the following items:
 - a. Hours of operation of each generator (hours/month and hours/year);
 - b. Natural gas usage for the heaters and oven (mmscf/month and mmscf/year);
 - c. Amount of each type of resin used in the injection molding machines (tons/month and tons/year); and
 - d. Detailed calculations of CO and VOM emissions.
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. Hours of operation of each generator (hours/month and hours/year);
 - b. Natural gas usage for the heaters and oven (mmscf/month and mmscf/year); and
 - c. Calculations of CO and VOM emissions (tons/month and tons/year).

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

It should be noted that the used oil storage tank is exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(n).

If you have any questions on this, please call Tara T. Nguyen-Ede at 217/782-2113.

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

DES:TNE:psj

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

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the plastic manufacturing 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 a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons/year for carbon monoxide (CO), 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.

1. Emissions of volatile organic material (VOM) and operation of the 125 injection molding machines shall not exceed the following limits:

<u>Resin Material</u>	<u>Usage</u>		<u>VOM Emission Factor (Lb/Ton)</u>	<u>VOM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
ABS	188	1,500	2.0	0.2	1.5
Polystyrene	438	3,500	0.4	0.1	0.7
Polyethylene & Other Thermoplastic Resins	2,785	22,500	0.4	0.6	4.5
			<u>Total</u>	<u>0.9</u>	<u>6.7</u>

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2. This permit is issued based on negligible emissions of particulate matter from the 125 injection molding machines. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 3a. Emissions from the nine generators shall not exceed the following limits:

<u>Pollutant</u>	<u>Per Generator</u>		
	<u>(Hp)</u>	<u>(Hours/Year)</u>	<u>Emissions (Tons/Year)</u>
	1,085	4,888	
	<u>Emission Factor (Lb/Hp-Hour)</u>	<u>(Lb/Hour)</u>	<u>Emissions (Tons/Year)</u>
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- b. Natural gas shall be the only fuel combusted in the generators. Use of any other fuel requires a permit revision.
- 4a. Fuel combustion emissions and operation of the heater and ovens shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>Factor</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
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