

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Tech Finishers, Incorporated
Attn: Charles Coxé
208 Fay Avenue
Addison, Illinois 60101

Application No.: 93030001

I.D. No.: 043005AJX

Applicant's Designation:

Date Received: April 4, 2002

Subject: Coating Plant

Date Issued: August 24, 2002

Expiration Date: August 24, 2007

Location: 208 Fay Avenue and 136 Commercial Avenue, Addison

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of six parts washers with six dry-off ovens, fifteen liquid paint booths controlled by filters with six paint cure ovens, twelve powder coating booths controlled by three filters, two burn-off ovens and solvent clean-up operations 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 two above-referenced locations constituting single source to less than major source thresholds (i.e., 25 tons/yr for volatile organic material (VOM), 10 tons per year of any single Hazardous Air Pollutant (HAP) and 25 tons per year of 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.
- 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.
- 2a. Pursuant to 35 Ill. Adm. Code 218.205(b)(1), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to 218.204(j)(4)(B) of 2.8 pounds of VOM per gallon of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator.
- b. The calculations of daily-weighted average VOM content (minus water and any exempt compounds) of the coating as applied for each corresponding numerical limitation as calculated with the following equation:

$$\text{VOM}_w = \frac{\sum_{i=1}^n V_i \times C_i}{V_T}, \text{ where:}$$

- VOM_w = The average VOM content of two or more coatings as applied each day on a coating line in units of kg VOM/l lbs (VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM),
- n = The number of different coatings as applied each day on a coating line,
- V_i = The volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of 1 (gal),
- C_i = The VOM content of each coating as applied each day on a coating line in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM), and
- V_T = The total volume of all coatings (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of 1 (gal).

3. Plant-wide VOM emissions from solvent-based painting operations shall not exceed 2.0 tons/month and 22.0 tons/year.

The VOM emissions shall be determined from the following equation on a monthly basis:

$$E = S(P_i \times C_i), \text{ Where:}$$

E - VOM emissions (tons),

P_i - paint usage (gallons/month),

C_i - VOM content of the paint (lb/gal).

These limits define the potential emissions of VOM and 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 the preceding 11 months.

4. Solvent usage and VOM emissions from clean-up operations shall not exceed the following limits: 0.1 ton/mo, 1.0 ton/yr.

Solvent usage shall be determine from the following equation:

$$U = V - W \times C, \text{ where:}$$

U - solvent usage (gal),

V - virgin solvent added to the process (gal),

W - certified amount of waste shipped off for disposal (gal),

C - certified VOM content of waste (fraction).

These limits define the potential emissions of VOM and 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 the preceding 11 months.

5. This permit is issued based on negligible emission of volatile organic materials from silk screening and powder coating operations. For this purpose, emissions from each operation shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/year.
6. 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 Agency. 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 Agency.
7. This permit is issued based on negligible emission of particulate matter from the parts washer, solvent and powder coating booths and burn-off ovens. For this purpose, emissions from each operation shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/year.
- 8a. The afterburners controlling burn-off ovens shall be preheated to an operating temperature of 1400°F before charging and this temperature shall be maintained during operation.
- b. The afterburner shall be equipped with temperature indicator.
9. Operation and emissions of the natural gas fired equipment (combined) shall not exceed the following limits:

Natural Gas Usage: 150,000 therms/mo, 1,700,000 therms/yr

<u>Pollutant</u>	<u>Emission Factors</u> (lb/10 ³ lb/therm)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	0.8	8.5
Carbon Monoxide (CO)	84	0.6	7.1
Particulate Matter (PM)	7.6	0.06	0.6
Volatile Organic Materials (VOM)	5.5	0.04	0.5

These limits are based on the maximum equipment operating rate and standard emission factors given by AP-42. Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

10. The Permittee shall maintain daily records for of the following items for each solvent-based coating line:
 - a. The name and identification number of each coating as applied on each coating line;
 - b. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from definition of VOM) as applied each day on each coating line.
 - c. The calculations of daily-weighted average VOM content of all coatings as applied on each coating line as required by Special Condition 2b.
11. The Permittee shall maintain monthly records of the following items:
 - a. The name, identification number, usage (gal/month, gal/yr), density (lb/gal) and VOM and HAP content (weight percent or lb/gal) of each coating used;
 - b. The name, identification number, usage (gal/month, gal/yr), density (lb/gal) and VOM and HAP content (weight percent or lb/gal) of each solvent used;
 - c. The name, identification number, usage (gal/month, gal/yr), density (lb/gal) and VOM and HAP content (weight percent or lb/gal) of each VOM-containing material used in the silk screening operations;
 - d. The calculations of VOM and HAP emission for current month and total running for last 12 months (ton/month, ton/year).
12. 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 Agency 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 an Agency request for records during the course of a source inspection.
13. 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 Agency's Compliance Unit 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 exceedances or violation and efforts to reduce emissions and future occurrences.
14. 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. VOM and HAP containing materials usage (ton/year) and VOM and HAP content of each material (wt.%);
 - b. Natural gas usage (therms/yr).
15. 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

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 - Emissions Summary

This attachment provides a summary of the maximum emission from the 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 the plant. The resulting maximum emissions are below the threshold levels (e.g., 25 tons/yr for VOM) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program (CAAPP). Actual emissions from this source will be less than predicted in this summary to the extent that VOM emissions are less than that required in this permit.

1. Plant-wide VOM emissions from solvent-based painting operations shall not exceed 2.0 tons/month and 22.0 tons/year.
2. Solvent usage and VOM emissions from clean-up operations shall not exceed the following limits: 0.1 ton/mo, 1.0 ton/yr.
3. This permit is issued based on negligible emission of volatile organic materials from silk screening and powder coating operations. For this purpose, emissions from each operation shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/year.
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 Agency. 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 Agency.
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6. Operation and emissions of the natural gas fired equipment (combined) shall not exceed the following limits:

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