

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

American Decorative Surfaces, Inc.
Attn: Samuel E. Torigian
1610 Design Way
Dupo, Illinois 62239

Application No.: 03040066

I.D. No.: 163035AAE

Applicant's Designation:

Date Received: April 25, 2003

Subject: Rotogravure Printing Facility

Date Issued:

Expiration Date:

Location: 1610 Design Way, Dupo

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of seven rotogravure printing presses and eight pre-production presses with natural gas-fired dryers, one laminating machine and one glycol ether storage tank, all controlled by building enclosure and regenerative thermal oxidizer, 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., 100 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled 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 permits for this location.
2. This permit is issued based upon the plant not being subject to the VOM control requirements of 35 Ill. Adm. Code, Part 219, Subpart H: Flexographic and Rotogravure Printing since no rotogravure packaging or publication printing is performed at the plant.
3. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, unless such emissions are controlled by thermal incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water. The following exception applies: If no odor nuisance exists the limitation shall apply only to photochemically reactive material (35 Ill. Adm. Code 219.301 and 302).

4. Plant-wide VOM and HAP emissions from printing operations shall not exceed the following limits:

VOM - 7.0 ton/mo, 76.0 ton/yr
 Total HAPs - 1.7 ton/mo, 19.9 ton/yr
 Single HAP - 0.7 ton/mo, 7.9 ton/yr

The VOM(HAP) emissions shall be calculated using the following equation:

$$E = (\sum U \times C_i - W \times C_w) \times (1 - C_c \times C_d), \text{ where}$$

E - VOM (HAP) emissions (ton);
 U - VOM- (HAP-)containing raw materials usage (ton);
 C_i - VOM (HAP) content of raw materials (wt. fraction);
 W - certified amount of waste disposed (ton);
 C_w - certified VOM (HAP)* content of the waste (wt. fraction);
 C_c, C_d - capture and destruction efficiencies of the control device demonstrated during the most recent stack test.

*HAP content of the waste may be assumed proportional to the HAP fraction of total VOM used during the corresponding period.

These limits are based on the maximum operating rates and continuous capture system and regenerative oxidizer operations at all times when any printing or clean-up activities are taking place at the plant. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 5a. Emissions and operation of the natural gas combustion equipment shall not exceed the following limits:

Natural Gas Usage: 142 mmscf/mo, 1,420 mmscf/yr

| <u>Pollutant</u> | <u>Emission Factor</u> (lb/mmscf) | <u>Emissions</u> | |
|------------------------------------|---------------------------------------|------------------|----------|
| | | (Ton/Mo) | (Ton/Yr) |
| Nitrogen Oxides (NO _x) | 100 | 7.1 | 71.0 |
| Carbon Monoxide (CO) | 84 | 6.0 | 59.6 |
| Particulate Matter (PM) | 7.6 | 0.5 | 5.4 |
| Volatile Organic Materials (VOM) | 5.5 | 0.4 | 3.9 |

- b. Propane is allowed to be used as an alternative fuel up to one week period per year in the event of interruption of the natural gas supply.

These limits are based on the maximum operating rate and standard emission factors given by AP-42 (Tables 1.4-1 and 1.4-2, Volume I, March 1998) for natural gas combustion in Small Boilers (<100 Mbtu/hr). Compliance with annual limits shall be determined from a running total of 12 months of data.

- 6a. The afterburner shall be equipped with a continuous monitoring devices which are installed, calibrated, maintained, and operated according to vendor specifications at all times that the afterburner is in use.

These devices shall monitor and calculate the 3-hours average values of the afterburner combustion chamber temperature and inlet air flow rate.

- b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but not less than the temperature during the most recent stack test (1,600° on the 3-hours average basis). This temperature shall be maintained during all operation time.
 - c. The air flow rate to the afterburner shall not exceed the manufacturer's recommended rate but not more than the air flow rate during the most recent stack test (90,000 scfm on the 3-hours average basis).
7. The Permittee shall maintain daily records of the following items:
 - a. A log of operating time for the afterburner, monitoring equipment, and the associated printing lines activities;
 - b. A maintenance log for the afterburner and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.
 8. The Permittee shall maintain monthly records of the following items:
 - a. Names and amounts of all VOM- and HAP-containing materials used (ton/mo, ton/yr);
 - b. VOM and HAP content of materials in item (a) (wt%); and
 - c. VOM and HAP emission calculations (ton/mo, ton/yr).
 9. 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 or USEPA request for records during the course of a source inspection.
 10. 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 and Enforcement 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.
 11. 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 Illinois EPA
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 Illinois EPA
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

12. The Permittee shall submit the following additional information with the Annual Emission Report, due May 1st of each year: annual inks, solvents and natural gas usage from the prior calendar year.

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

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

cc: Region 3

DES:VJB

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Decorative Surfaces Printing 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 per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP 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.

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VJB: