

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Colbert Packaging Corporation
Attn: Bill Snyder
28344 North Bradley Road
Lake Forest, Illinois 60045

Application No.: 02020031

I.D. No.: 097080AAY

Applicant's Designation:

Date Received: February 8, 2002

Subject: Printing Facility

Date Issued: February 14, 2003

Expiration Date: February 14, 2008

Location: 28344 North Bradley Road and 13777 West Laurel Drive, Lake Forest

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two sheetfed offset lithographic presses with infrared dryers, three flexographic printing presses with UV curing lamps and infrared dryers, pre press area, parts washer, and HVAC system 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., 25 tons/year for volatile organic material (VOM)). As a result the source is excluded from the requirement 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 issued for this location.
2. This permit is issued based on the potential to emit emissions of VOM from all flexographic printing lines (including clean up operations associated with the flexographic printing lines) being limited to less than 25 tons per year as determined in accordance with 35 Ill Adm. Code Section 218.402(a)(2). Therefore, the requirements of 35 Ill Adm. Code Section 218.401 are not applicable to the flexographic printing lines.
3. Pursuant to 35 Ill. Adm. Code Section 218.301, 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, except as provided in Sections 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of Subpart G shall apply only to photochemically reactive material.

4. Emissions of volatile organic material, VOM, and operation of the three flexographic presses shall not exceed the following limits:

VOM Usage*		VOM Emissions	
<u>(Ton/Mo)</u>	<u>(Ton/Year)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Year)</u>
0.43	4.3	0.43	4.3

* VOM usage limit includes all coatings, inks, varnishes, clean-up solvents, adhesives, and any other solvents.

These limits define the potential emissions of VOM and are based on maximum material usage and VOM content for coatings, inks, varnishes, clean-up solvents, adhesives, and any other solvents. VOM usage shall be calculated using the equation in Condition 13(c). Compliance with annual limits shall be determined from a running total of 12 months of data.

5. Emissions of VOM and operation of the two sheetfed offset lithographic presses shall not exceed the following limits:

VOM Usage*		VOM Emissions	
<u>(Ton/Mo)</u>	<u>(Ton/Year)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Year)</u>
2.0	20.0	2.0	20.0

* VOM usage limit includes all coatings, inks, varnishes, clean-up solvents, fountain solutions, and any other solvents.

These limits define the potential emissions of VOM and are based on maximum material usage, individual VOM content, and a retention factor of 95% for the inks used in the sheetfed presses. VOM usage and emissions shall be calculated based on Condition 13(c). 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.

6. This permit is issued based on negligible emissions of volatile organic material from the pre press area, parts washer, and HVAC system. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.22 ton/yr.
7. 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.
8. The Permittee must comply with the following emission limitations and control requirements for the sheetfed lithographic printing lines, pursuant to 35 Ill. Adm. Code 218.407:

- a. The VOM content of the as applied fountain solution shall not exceed 5.0 percent, by volume;
 - b. The VOM composite partial vapor pressure of the as-used cleaning solution shall be less than 10 mmHg at 20°C (68°F); and
 - c. The VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line must be kept, stored, or disposed of in closed containers.
9. Testing to determine compliance with the requirements of 35 Ill. Adm. Code 218.407 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA, pursuant to 35 Ill. Adm. Code 218.409. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting such testing to allow the Illinois EPA to be present during such testing.
10. The Permittee shall comply with the following monitoring requirements for all lithographic printing lines, pursuant to 35 Ill. Adm. Code 218.410:
- a. Determine the VOM content of the as-applied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level;
 - b. Install, maintain, calibrate and operate the equipment used to make automatic additions in accordance with manufacturer's specifications; and
 - c. Keep records for cleaning solutions used on any such lines as set forth in 35 Ill. Adm. Code 218.411(d)(2)(C).
11. The Permittee shall perform the following recordkeeping and reporting requirements for lithographic printing lines, pursuant to 35 Ill. Adm. Code 218.411 to show compliance with the emission limitations and control requirements of to 35 Ill. Adm. Code 218.407 and the testing requirements of to 35 Ill. Adm. Code 218.409:
- a. The Permittee shall collect and record the following information for each fountain solution used on each printing line:
 - i. Name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line (s) or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch.
 - b. The Permittee shall collect and record the following information for each cleaning solution used on each printing line:
 - i. Name and identification of each cleaning solution;

- ii. Date and time of preparation and each subsequent modification of the batch;
 - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent as determined in accordance with Section 219.409 (e);
 - iv. Total amount of each cleaning solvent used to prepare the as-used cleaning solution;
 - v. The VOM composite partial vapor pressure of each as-used cleaning solution; and
 - vi. The date, time, and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of close containers, with descriptions of actual practice and corrective action taken, if any.
- c. If changing its method of demonstrating compliance with the applicable limitations in Section 218.407 of this Subpart certify compliance for such new method(s) in accordance with 218.411 (c)(1) within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407 of this Subpart.
12. Pursuant to 35 Ill Adm. Code Section 218.404(b) owner or operator of a flexographic printing line exempted from the limitations of Section 218.401 shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
- a. The name and identification number of each coating and ink as applied on each printing line.
 - b. The VOM content and the volume of each coating and ink as applied each year on each printing line.
 - c. On and after a date consistent with Section 218.106 of this Part, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of Section 218.401 of this Part because of the criteria in Section 218.402 of this Part shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
13. The Permittee shall maintain records of the following items:
- a. Amount of each coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM containing material used in

the sheetfed and flexographic printing presses (gal or tons/mo and gal or tons/yr);

- b. VOM content of each coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM containing material used in the sheetfed and flexographic printing presses (lb VOM/gal or wt.%); and
- c. Detailed calculations of VOM usage and emissions. The following equations shall be used to calculate VOM usages:

$$Te = \sum_i^n AiBi$$

Where:

*Te = VOM usage/emissions in units of lb/mo

n = Number of different coatings, inks, varnishes, clean-up solvents, fountain solutions, adhesives, and any other VOM containing materials used in the sheetfed and flexographic printing presses each month

i = Subscript denoting an individual coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM containing material

Ai = VOM content of each coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM containing material used in the sheetfed and flexographic printing presses each month in units of lbs VOM/gal or % wt

Bi = Amount of each coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM containing material used in the sheetfed and flexographic printing presses each month in units of gal/mo or lbs/mo

* To determine VOM emissions from inks used on the sheetfed lithographic printing line(s), an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all sheetfed inks to account for VOM retention in the substrate.

- 14. 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.

15. 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.
16. 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

17. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: solvent usages, solvent VOM content, and detailed calculations of VOM usage/emissions from the prior calendar year. If there has been no exceedance of a requirement of this permit during the prior calendar year, the annual emission report shall contain a statement to that effect.

It should be noted that this permit includes equipment from two facilities located at 28344 North Bradley Road and 13777 West Laurel Drive in Lake Forest.

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

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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 printing 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 such a plant. The resulting maximum emissions are well below the levels, e.g., 25 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.

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<u>VOM Usage*</u>		<u>VOM Emissions</u>	
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