

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Corporate Express Document & Print Management  
Attn: Maureen Matzer  
176 West Terra Cotta Avenue  
Crystal Lake, Illinois 60014

Application No.: 04090056

I. D. No.: 111015ACP

Applicant's Designation:

Date Received: March 10, 2008

Subject: Lithographic Printing Presses

Date Issued: May 23, 2008

Expiration Date: November 8, 2011

Location: 176 West Terra Cotta Avenue, Crystal Lake, McHenry County

This permit is hereby granted to the above-designated Permittee to OPERATE thirteen (13) non-heatset offset lithographic printing presses 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:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for any combination of such HAPs). 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.
  - ii. To limit the emissions of volatile organic materials (VOM) from the construction of new emission units and other modifications at the source, which occurred without first obtaining construction permit(s) between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone), to less than 25 tons/year. As a result the source is excluded from the requirements of 35 Ill. Adm. Code Part 203, Major Stationary Source Construction and Modification.
  - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to initial issuance a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit issued for this location.

- 2a. Pursuant to 35 Ill. Adm. Code 218.204(c), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208 and 218.212 no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

	kg/l	lb/gal
Paper Coating	0.28	(2.3)

- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- 3a. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- b. Pursuant to 35 Ill. Adm. Code 218.405(d) (2), on and after March 15, 1996, 35 Ill. Adm. Code 218.407 through 218.410 shall apply to all owners or operators of heatset web offset, non-heatset web offset, or sheet-fed offset lithographic printing line(s), unless the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day) as determined in accordance with 35 Ill. Adm. Code 218.411(a) (1) (B) , before the application of capture systems and control devices.
- c. Pursuant to 35 Ill. Adm. Code 218.408(b), no owner or operator of a lithographic printing line which is exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d), shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, 35 Ill. Adm. Code 218.405(d) and 218.411(a).
4. 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 odor nuisance.

- 5a. The plant-wide VOM emissions from printing operations shall not exceed the following limits: 100 lbs/day, 2.0 tons/month and 10.1 tons/year. These limits are based on the maximum material usage and the maximum VOM emissions.
- b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
- c. VOM and HAP emissions shall be determined using the following equation:

$$\Sigma (I_i \times d_i \times C_i) \times 0.05 + \Sigma (S_j \times d_j \times C_j) - (W \times d_w \times C_w)$$

Where:

$I_i$  = Ink usage (gallons);

$d_i$  = Density of ink (lb/gallon);

$C_i$  = VOM or HAP content of the ink (% by weight);

$S_j$  = Solvent usage (gallons);

$d_j$  = Density of solvent (lb/gallon);

$C_j$  = VOM or HAP content of the solvent (lbs/gallon);

$W$  = Certified amount of waste shipped-off (gallons);

$d_w$  = Certified density of waste (lb/gallon); and

$C_w$  = Certified VOM or HAP content of the waste (% by weight).

- d. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 6a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures

adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 7 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 7. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
- 8a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating as applied on each coating line.
  - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
- b. Pursuant to 35 Ill. Adm. Code 218.411(a)(2), an owner or operator of lithographic printing line(s) exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d) shall collect and record either the information specified in 35 Ill. Adm. Code 218.411(a)(2)(A) or (a)(2)(B) for all lithographic printing lines at the source:
  - i. Standard recordkeeping, including the following:

- A. The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
  - B. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
  - C. The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
  - D. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and
  - E. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a) (1) (B);
- ii. Purchase and inventory recordkeeping, including the following:
- A. The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
  - B. Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;
  - C. Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;
  - D. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
  - E. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to 35 Ill. Adm. Code 218.411(a) (2) (B) (i), (a) (2) (B) (ii) and (a) (2) (B) (iii); and
  - F. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a) (1) (B);

- 9a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Names and amounts of conventional lithographic inks, digital inks and oils, fountain solutions and clean-up solvents used (tons/month, tons/year);
  - ii. VOM and HAP content of materials (% by weight);
  - iii. Density of materials (lb/gallon);
  - iv. Certified amount of waste material shipped off-site (tons);
  - v. Certified density of waste material shipped off-site (lb/gallon);
  - vi. Certified VOM content of the waste material (% by weight); and
  - v. Monthly and annual VOM and HAP emissions from the source with supporting calculations (tons/month, tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) 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 the Illinois EPA or USEPA request for records during the course of a source inspection.
10. If there is an exceedance of or deviation from 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/deviation. 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 deviation and efforts to reduce emissions and future occurrences.
- 11a. Pursuant to 35 Ill. Adm. Code 218.211(c) (3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:
- i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) (1) or (e) (1), respectively. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35

Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), respectively.

- b. Pursuant to 35 Ill. Adm. Code 218.411(a)(3), an owner or operator of lithographic printing line(s) exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d) shall notify the Illinois EPA in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

12. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Illinois EPA  
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 Illinois EPA  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 08030020.

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

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

Date Issued: \_\_\_\_\_

ECB:VJB:jws

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the lithographic 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 below the levels (e.g., 10 tons per year for a single HAP, and 25 tons per year for any combination of such 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 less material is handled and control measures are more effective than required in this permit.

<u>Process</u>	Emissions (Tons/Year)		
	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAP</u>
Lithographic Printing Operations	10.1	7.9	19.9

VJB:jws