

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Colbert Packaging Corporation
Attn: Bill Snyder
28355 North Bradley Road
Lake Forest, Illinois 60045

Application No.: 02020031

I.D. No.: 097080AAY

Applicant's Designation:

Date Received: July 17, 2014

Subject: Printing Facility

Date Issued: August 20, 2014

Expiration Date: November 15, 2023

Location: 28355 North Bradley Road and 13970 West Polo Trail Drive, Lake Forest, Lake County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two (2) sheetfed offset lithographic presses with infrared dryers, five (5) flexographic printing presses with UV curing lamps and infrared dryers, pre press area, parts washer, HVAC system and one flexographic plate imaging 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:
 - i. 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) and 10 tons/year for a single HAP and 25 tons/year of 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 establish federally enforceable production and operating limitations, which restrict a potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs so that the source is not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.
 - 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 requirements 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.

- iv. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year so that the flexographic presses at this source are not subject to the requirements of 35 Ill. Adm. Code 218 Subpart H: Printing and Publishing.
- b. Prior to initial 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.
- 2a. 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 apply only to photochemically reactive material.
- b. Pursuant to 35 Ill. Adm. Code 218.407(a)(3), no owner or operator of lithographic printing line(s) subject to the requirements of 35 Ill. Adm. Code 218 Subpart H shall cause or allow the operation of any sheet-fed offset lithographic printing line unless:
 - i. The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or
 - ii. The VOM content of the as-applied fountain solution is 8.5 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;
- c. Pursuant to 35 Ill. Adm. Code 218.407(a)(4), no owner or operator of lithographic printing lines subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart H shall cause or allow the use of a cleaning solution on any lithographic printing line unless:
 - i. The VOM content of the as-used cleaning solution is less than or equal to
 - A. 30 percent, by weight; or
 - B. On and after August 1, 2010, for owners or operators of sources that meet the applicability criteria in 35 Ill. Adm. Code 218.405(c)(3) and do not certify pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B) that the source will not make use of any of the exclusions in 35 Ill. Adm. Code 218.405(c)(3), 70 percent, by weight; or
 - ii. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F).

- d. Pursuant to 35 Ill. Adm. Code 218.407(a)(5), no owner or operator of lithographic printing lines subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart H shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers, except when specifically in use..
3. This permit is issued based upon the flexographic printing press not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
- 4a. This permit is issued based on the flexographic printing presses not being subject to 35 Ill. Adm. Code 218.187 (Other Industrial Solvent Cleaning Operations). Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B), notwithstanding 35 Ill. Adm. Code 218.187(a)(1) cleaning operations for emission units within the flexible package printing category shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g).
 - b. This permit is issued based on the flexographic printing press not being subject to 35 Ill. Adm. Code 218.204(c) (Paper Coating). Pursuant to 35 Ill. Adm. Code 218.204(c)(3), the paper coating limitation set forth in 35 Ill. Adm. Code 218.204(c) shall not apply to any owner or operator of any paper coating line on which flexographic, rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in 35 Ill. Adm. Code 218 Subpart H. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT. On and after May 1, 2011, the paper coating limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.
 - c. This permit is issued based upon the flexographic printing press not being subject to the requirements of 35 Ill. Adm. Code 218.401, Flexographic and Rotogravure Printing. This is a result of the federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of VOM from this facility to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year. Pursuant to 35 Ill. Adm. Code 218.402(a), except as otherwise provided in 35 Ill. Adm. Code 218.401, the limitations of 35 Ill. Adm. Code 218.401 apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources if:
 - i. Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines (including solvents used for

cleanup operations associated with flexographic and rotogravure printing lines) at the source ever exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision; or

- ii. The flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source have a potential to emit 22.7 Mg (25 tons) or more of VOM per year.
- 5a. Pursuant to 35 Ill. Adm. Code 218.401(d), no owner or operator of subject flexographic or rotogravure printing lines that print flexible packaging or print flexible packaging and non-flexible packaging on the same line shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with the subject flexographic or rotogravure printing lines to be kept, stored, or disposed of in any manner other than in closed containers, or conveyed from one location to another in any manner other than in closed containers or pipes, except when specifically in use.
- b. Pursuant to 35 Ill. Adm. Code 218.402(b), the limitations of 35 Ill. Adm. Code 218.401(d) shall apply to all owners or operators of flexographic or rotogravure printing lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, at a source where the combined emissions of VOM from all flexographic and rotogravure printing lines total 6.8 kg/day (15 lbs/day) or more (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines), in the absence of air pollution control equipment.
- 6. 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 material or installation of controls, in order to eliminate the nuisance.
- 7a. Emissions of volatile organic material (VOM) and operation of the five flexographic presses and flexographic plate imaging system shall not exceed the following limits:

VOM Usage*		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
0.83	8.3	0.83	8.3

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

These limits are based on maximum material usage and VOM content for coatings, inks, varnishes, clean-up solvents, adhesives, and any other solvents.

- b. Emissions of VOM and operation of the two sheetfed offset lithographic presses (including replacement press) shall not exceed the following limits:

VOM Usage*		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
1.6	16.0	1.6	16.0

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

These limits are based on maximum material usage, individual VOM content, and a retention factor of 95% for the inks used in the sheetfed presses.

- c. The following equations shall be used to calculate VOM usages:

$$Te = \sum_i^n AiBi$$

Where:

*Te = VOM usage/emissions (lbs);

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 (% weight);

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 (lbs); and

* 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.

- d. 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/year.
 - e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 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 requirement to obtain a CAAPP permit from the Illinois EPA and the requirements of the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.
 - f. 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).
- 8a. 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 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

- 9a. Pursuant to 35 Ill. Adm. Code 218.404(a), the VOM content of each coating and ink 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 218.404.
 - b. Pursuant to 35 Ill. Adm. Code 218.409(c), Testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A), and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of 35 Ill. Adm. Code 218.411(a)(1)(B), (b)(1)(B), or (b)(2)(B), as applicable, shall be conducted upon request of the Agency or as otherwise specified, as follows:
 - i. The applicable test methods and procedures specified in Section 218.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at 35 Ill. Adm. Code 218.112, shall be used to demonstrate compliance; or
 - ii. The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 24 35 Ill. Adm. Code 218.105(a); provided, however, Method 24 shall be used to determine compliance.
 - c. Pursuant to 35 Ill. Adm. Code 218.409(e), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. 218.110.
- 10a. Pursuant to 35 Ill. Adm. Code 218.410(a), Fountain Solution Temperature:
 - i. The owner or operator of any lithographic printing line(s) relying on the temperature of the fountain solution to demonstrate compliance shall install, maintain, and continuously operate a temperature monitor of the fountain solution in the reservoir or fountain tray, as applicable.
 - ii. The temperature monitor must be capable of reading with an accuracy of 1°C or 2°C, and must be attached to an automatic, continuous recording device such as a strip chart, recorder, or computer, with at least the same accuracy, that is installed, calibrated and maintained in accordance with the manufacturer's specifications. If the automatic, continuous recording device malfunctions, the owner or operator shall record the temperature of the fountain solution at least once every two operating hours.

The automatic, continuous recording device shall be repaired or replaced as soon as practicable.

- b. Pursuant to 35 Ill. Adm. Code 218.410(b), Fountain Solution VOM Content. The owner or operator of any lithographic printing line(s) subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) or (a)(3) shall:
 - i. For a fountain solution to which VOM is not added automatically:
 - A. Maintain records of the VOM content of the fountain solution in accordance with 35 Ill. Adm. Code 218.411(c)(2)(C); or
 - B. Take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:
 - I. With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain solution prepared or modified, whichever is longer; or
 - II. With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications;

- ii. For fountain solutions to which VOM is added at the source with automatic feed equipment, 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. Records must be retained of the VOM content of the fountain solution in accordance with 35 Ill. Adm. Code 218.411(c)(2)(D). The equipment used to make automatic additions must be installed, calibrated, operated, and maintained in accordance with manufacturer's specifications.
- c. Pursuant to 35 Ill. Adm. Code 218.410(e), Cleaning Solution:
 - i. The owner or operator of any lithographic printing line relying on the VOM content of the cleaning solution to comply with 35 Ill. Adm. Code 218.407(a)(4)(A) must:
 - A. For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
 - I. Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and
 - II. Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with 35 Ill. Adm. Code 218.407(a)(4)(A).
 - B. For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in 35 Ill. Adm. Code 218.411(d)(2).
 - ii. The owner or operator of any lithographic printing line relying on the vapor pressure of the cleaning solution to comply with 35 Ill. Adm. Code 218.407(a)(4)(B) must keep records for such cleaning solutions used on any such line(s) as set forth in 35 Ill. Adm. Code 218.411(d)(2)(C).
- 11. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5

years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- 12a. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), any owner or operator of a printing line which is exempted from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line referenced in this subsection 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:
- i. The name and identification number of each coating and ink as applied on each printing line.
 - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
- b. Pursuant to 35 Ill. Adm. Code 218.404(h), all records required by 35 Ill. Adm. Code 218.404(f) and (g) shall be retained for at least three years and shall be made available to the Illinois EPA upon request.
- c. Pursuant to 35 Ill. Adm. Code 218.411(c)(2), Unless complying with 35 Ill. Adm. Code 218.411(b)(1)(C) and (b)(1)(F), an owner or operator of lithographic printing lines subject to the requirements of 35 Ill. Adm. Code 218.411 (a) or (b) shall collect and record either the information specified in 35 Ill. Adm. Code 218.411 (c)(1) or (c)(2) for all lithographic printing lines at the source standard recordkeeping, including the following:

- i. The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
 - ii. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
 - iii. 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;
 - iv. 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;
 - v. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.204 (a)(1)(B), (b)(1)(B), or (b)(2)(B), as applicable;
- d. Pursuant to 35 Ill. Adm. Code 218.411(e)(2), an owner or operator of a lithographic printing line subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3), shall collect and record the following information for each fountain solution:
- i. The 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;
 - ii. If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to 35 Ill. Adm. Code 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3):
 - A. The date and time of preparation and each subsequent modification of the batch;
 - B. The results of each measurement taken in accordance with 35 Ill. Adm. Code 218.410(b);
 - C. Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and

- D. Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;
- iii. If the VOM content of the fountain solution is determined pursuant to 35 Ill. Adm. Code 218.410(b)(1)(A), for each batch of as-applied fountain solution:
 - A. Date and time of preparation and each subsequent modification of the batch;
 - B. Volume or weight, as applicable, and VOM content of each component used in, or subsequently added to, the fountain solution batch;
 - C. Calculated VOM content of the as-applied fountain solution; and
 - D. Any other information necessary to demonstrate compliance with the applicable VOM content limits in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) and (a)(3), as specified in the source's operating permit.
 - iv. If the VOM content of the fountain solution is determined pursuant to 35 Ill. Adm. Code 218.410(b)(2), for each setting:
 - A. VOM content limit corresponding to each setting;
 - B. Date and time of initial setting and each subsequent setting;
 - C. Documentation of the periodic calibration of the automatic feed equipment in accordance with the manufacturer's specifications; and
 - D. Any other information necessary to demonstrate compliance with the applicable VOM content limits in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) and (a)(3), as specified in the source's operating permit;
 - v. If the owner or operator relies on the temperature of the fountain solution to comply with the requirements in 35 Ill. Adm. Code 218.407(a)(1)(A)(ii) or (a)(3)(B):
 - A. The temperature of the fountain solution at each printing line, as monitored in accordance with 35 Ill. Adm. Code 218.410(a); and
 - B. A maintenance log for the temperature monitoring devices and automatic, continuous temperature recorders detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

- e. Pursuant to 35 Ill. Adm. Code 218.411(f)(2), for lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of 35 Ill. Adm. Code 218.407 shall collect and record the following information for each cleaning solution used on each lithographic printing line:
 - i. For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(A) and which is prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(c);
 - C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
 - D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - E. The VOM content of the as-used cleaning solution, with supporting calculations; and
 - F. A calibration log for the automatic equipment, detailing periodic checks.
 - ii. For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(A) and that is not prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. Date and time of preparation, and each subsequent modification, of the batch;
 - C. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(c);
 - D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

- E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a);
- iii. For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(B):
 - A. The name and identification of each cleaning solution;
 - B. Date and time of preparation, and each subsequent modification, of the batch;
 - C. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with 35 Ill. Adm. Code 218.409(e). For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a) and 218.110;
 - D. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
 - E. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(e). For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a) and 218.110;
 - iv. 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 closed containers, with descriptions of actual practice and corrective action taken, if any;
- f. Pursuant to 35 Ill. Adm. Code 218.411(g)(2)(A), the owner or operator of lithographic printing lines subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) shall, unless the source has certified in accordance with 35 Ill. Adm. Code 218.411(g)(1)(B) that it will not make use of any of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3), collect and record the following information for all lithographic printing lines at the source:

- i. Calculations that demonstrate that 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 never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, determined in accordance with the calculations in 35 Ill. Adm. Code 218.411(b)(2)(B);
 - ii. The amount of cleaning materials used on lithographic printing lines at the source that does not comply with the cleaning material limitations in 35 Ill. Adm. Code 218.407(a)(4);
 - g. Pursuant to 35 Ill. Adm. Code 218.411(h), the owner or operator shall maintain all records required by 35 Ill. Adm. Code 218.411 at the source for a minimum period of three years and shall make all records available to the Illinois EPA upon request.
- 13a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Amount of each coating, ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM/HAP containing material used in the sheetfed and flexographic printing presses (gallons or tons/month and gallons or tons/year);
 - ii. VOM and HAP content of each ink, varnish, clean-up solvent, fountain solution, adhesive, and any other VOM/HAP containing material used in the sheetfed and flexographic printing presses (lbs VOM/gallon or weight %); and
 - iii. Monthly and annual VOM and HAP emissions (tons/month and tons/year) with supporting calculations.
 - 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 storage device) 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.
- 14a. Pursuant to 35 Ill. Adm. Code 218.404(b)(3), any owner or operator of a printing line which is exempted from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a)

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, or that the combined potential to emit of all flexographic and rotogravure printing lines at the source equals or exceeds 22.7 Mg (25 tons) of VOM in any calendar year, by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.

- b. Pursuant to 35 Ill. Adm. Code 218.404(g)(2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401(d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.401(d) by sending a description of the violation and copies of records documenting such violations to the Illinois EPA within 30 days following the occurrence of the violation.
- c. Pursuant to 35 Ill. Adm. Code 218.411(e), an owner or operator of a lithographic printing line subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3), shall:
 - i. By August 1, 2010, and upon initial start-up of a new lithographic printing line, certify to the Illinois EPA that fountain solutions used on each lithographic printing line will be in compliance with the applicable VOM content limitation. Such certification shall include:
 - A. Identification of each lithographic printing line at the source, by type, e.g., heatset web offset, non-heatset web offset, or sheet-fed offset;
 - B. Identification of each centralized fountain solution reservoir and each lithographic printing line that it serves;
 - C. A statement that the fountain solution will comply with the VOM content limitations in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3), as applicable;
 - D. Initial documentation that each type of fountain solution will comply with the applicable VOM content limitations, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;
 - E. Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitation, e.g., a refractometer, hydrometer, conductivity meter, or recordkeeping procedures with detailed description of the compliance methodology; and
 - F. A sample of the records that will be kept pursuant to 35 Ill. Adm. Code 218.411(e)(2).

- ii. Notify the Illinois EPA in writing of any violation of 35 Ill. Adm. Code 218.407 within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation.
- d. Pursuant to 35 Ill. Adm. Code 218.411(f), for lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of 35 Ill. Adm. Code 218.407 shall:
 - i. By August 1, 2010, and upon initial start-up of a new lithographic printing line, certify to the Illinois EPA that all cleaning solutions, other than those excluded pursuant to 35 Ill. Adm. Code 218.405(c)(3)(C), and the handling of all cleaning materials, will be in compliance with the requirements of 35 Ill. Adm. Code 218.407(a)(4)(A) or (a)(4)(B) and (a)(5), and such certification shall also include:
 - A. A statement that the cleaning solution will comply with the limitations in 35 Ill. Adm. Code 218.407(a)(4);
 - B. Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - C. A sample of the records that will be kept pursuant to 35 Ill. Adm. Code 218.411(f)(2); and
 - D. A description of the practices that ensure that VOM-containing cleaning materials are kept in closed containers;
 - ii. Notify the Illinois EPA in writing of any violation of 35 Ill. Adm. Code 218.407 within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation.
- e. Pursuant to 35 Ill. Adm. Code 218.411(g), the owner or operator of lithographic printing lines subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) shall:
 - i. By August 1, 2010, or upon initial start-up of a new lithographic printing line that is subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3), whichever is later, submit a certification to the Illinois EPA that includes either:
 - A. A declaration that the source is subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) and a statement indicating which such exclusions apply to the source; or

- B. A declaration that the source will not make use of any of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3);
 - ii. If changing from utilization of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) to opting out of such exclusions pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B), or if there is a change at the source such that the exclusions no longer apply, certify compliance in accordance with 35 Ill. Adm. Code 218.411(g)(1)(B), 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 35 Ill. Adm. Code 218.407;
 - iii. If changing from opting out of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B) to utilization of such exclusions, certify compliance in accordance with 35 Ill. Adm. Code 218.411(g)(1)(A) within 30 days after making such change.
- 15a. If there is an exceedance of or a 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 or 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.

- b. Two (2) copies of required reports and notifications 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

It should be noted that this permit has been revised to include operation of the equipment and modifications described in Construction Permit 13040023.

If you have any questions on this, please call Jocelyn Stakely at 217/785-1705.

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Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:JRS:jws

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the commercial 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., 100 tons/year for volatile organic material (VOM) 10 tons per year for any single HAP, and 25 tons per year for any combination of such HAPs) 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>Equipment</u>	E M I S S I O N S (Tons/Year)		
	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAPs</u>
2 Sheetfed Presses	16.00		
5 Flexographic Presses and Flexographic plate imaging system	8.30		
Pre-press area	0.22		
Parts washer	0.22		
HVAC system	<u>0.22</u>		
Totals:	24.96	<u>9.0</u>	<u>22.5</u>