

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

PERMITTEE

Triumph Packaging
Attn: Scott Ward, Chief Operating Officer
515 West Crossroads Parkway
Bolingbrook, Illinois 60440

<u>Application No.:</u> 10040040	<u>I.D. No.:</u> 197415AAL
<u>Applicant's Designation:</u>	<u>Date Received:</u> April 20, 2010
<u>Subject:</u> Non-heatset Lithographic Printing & Water-based Adhesive Application	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 515 West Crossroads Parkway, Bolingbrook, Will County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Three (3) Non-Heatset Offset Sheetfed Lithographic Presses;
Seven (7) Adhesive Applicators; and
Three (3) Window Packaging Gluers

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/yr for Volatile Organic Material (VOM) and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for 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.
 - ii. 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.
 - iii. 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 source is not subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes).
- 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 218.204(c), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, 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 Paper 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. (Note: The equation presented in 35 Ill. Adm. Code 218.206 shall be used to calculate emission limitations for determining compliance by add on controls, credits for transfer efficiency, emissions trades and cross line averaging.) The emission limitations are as follows:
 - i. Prior to May 1, 2011:

	kg/l	lb/gal
	0.28	(2.3)

 - ii. On and after May 1, 2011:

	kg VOM/kg (lb VOM/lb)	kg VOM/kg (lb VOM/lb)
	solids applied	coatings applied
A. Pressure sensitive tape and label surface coatings	0.20	(0.067)
B. All other paper coatings	0.40	(0.08)

 - iii. 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 or rotogravure printing is performed if the paper coating line complies with the emissions limitations in 35 Ill. Adm. Code 218.401. 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.

- 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, 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.

- c. Pursuant to 35 Ill. Adm. Code 218.407(a), no owner or operator of lithographic printing line(s) subject to the requirements of 35 Ill. Adm. Code 218 Subpart H shall:
 - i. Cause or allow the operation of any sheet-fed offset lithographic printing line unless:
 - A. The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or
 - B. 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;
 - ii. Cause or allow the use of a cleaning solution on any lithographic printing line unless:
 - A. The VOM content of the as-used cleaning solution is less than or equal to 30 percent by weight; or
 - B. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F).
 - iii. 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.
- 3a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK because flexographic and rotogravure printing presses are not used at this source.
- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. Pursuant to 40 CFR 63.3300(c), web coating lines in lithography, screenprinting, letterpress, and narrow-web flexographic printing processes are not part of the affected source of 40 CFR 63 Subpart JJJJ.
- 4a. 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. This permit is issued based on the three (3) Window Packaging Gluers not being subject to 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes). This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit for VOM from the source to less than 25 tons per year.

- 5a. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

- b. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

- c. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

- d. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.

- 6a. Pursuant to 35 Ill. Adm. Code 218.218(a), on and after May 1, 2011, every owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 218.204(c) shall:
 - i. Store all VOM-containing cleaning materials in closed containers;
 - ii. Ensure that mixing and storage containers used for VOM-containing materials are kept closed at all times except when depositing or removing those materials;
 - iii. Minimize spills of VOM-containing cleaning materials;
 - iv. Convey VOM-containing cleaning materials from one location to another in closed containers or pipes; and
 - v. Minimize VOM emissions from the cleaning of storage, mixing, and conveying equipment.

- b. 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).

- 7. 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.

- 8a. Emissions from and operation of the three (3) non-heatset offset sheetfed lithographic presses shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Maximum VOM Content</u> <u>(% by Wt.)</u>	<u>VOM Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>		<u>(T/Mo)</u>	<u>(T/Yr)</u>
Inks	10.00	100.00	42.20	0.21	2.11
Fountain Solution	0.89	8.90	24.72	0.22	2.20
FS Additive	0.15	1.50	100.00	0.15	1.50
Cleanup Solvent	1.46	14.60	100.00	0.73	7.30
Coatings	20.00	200.00	2.63	0.53	5.25
				Total:	18.36

These limits are based on the maximum material usage, the maximum VOM content, 95 percent of VOM in the inks retained in the substrate, and a 50% retention factor of the cleaning solution used may be presumed as

stated in USEPA's Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing (EPA 453/R-06-002, September 2006).

- b. Emissions from and operation of the seven adhesive applicators shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Maximum VOM Content</u> <u>(% by Wt.)</u>	<u>VOM Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>		<u>(T/Mo)</u>	<u>(T/Yr)</u>
Adhesives	6.75	45	1.11	0.08	0.50

These limits are based on the maximum material usage and the maximum VOM content of the adhesives.

- c. This permit is issued based on negligible emissions of volatile organic material (VOM) from the three (3) window package gluers and cleanup solvent. For this purpose, emissions from each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.79 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 requirement to obtain a CAAPP permit from the Illinois EPA.
- e. The VOM and HAP emissions shall be calculated using the following equation:

$$E = \sum(I \times V_I \times 0.05) + \sum(S_m \times V_m \times 0.5) + \sum(S \times V),$$

where:

E = VOM or HAP emissions (tons);

I = Ink usage (tons);

V_I = VOM or HAP content of the ink (weight fraction);

S_m = Manual cleaning solvent usage for the lithographic presses (tons);

V_m = VOM content of manual cleaning solvent for the lithographic presses (weight fraction);

S = Coating, varnish, fountain solution usage, and cleaning solvents used with the adhesive applicators and the window package gluers (tons);

V = VOM content of coating, varnish, fountain solution, and cleaning solvents used with the adhesive applicators and the window package gluers (weight fraction).

- 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).
- 9a. 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 10 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 10a. 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.
 - b. Pursuant to 35 Ill. Adm. Code 218.409(a), testing to demonstrate 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. Such testing shall be conducted at the expense of the owner or operator and the owner or operation 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.

- c. 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)), shall be conducted upon request of the Illinois EPA, as follows:
 - i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used; provided, however, Method 24, 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 35 Ill. Adm. Code 218.105(a); provided, however, Method 24 shall be used to determine compliance.
- d. 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.
- 11a. 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:

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.

- 13a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), 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 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(c)(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 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).
- 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).
- 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.
- c. Pursuant to 35 Ill. Adm. Code 218.411(d)(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 which 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.
- 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);
 - 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).
- 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;
- 14a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Name and identification of inks, fountain solution, cleaning solution, adhesives, coatings, and other VOM and HAP containing materials used;
 - ii. Usage of inks, fountain solution, cleaning solution, adhesives, coatings, and other VOM and HAP containing materials used (tons/month, tons/year);
 - iii. VOM and HAP content of inks, fountain solution, cleaning solution, adhesives, coatings, and other VOM and HAP containing materials used , as-applied (weight %); and
 - iv. Monthly and annual emissions of VOM and HAP from the source (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.
- 15a. Pursuant to 35 Ill. Adm. Code 218.211(c), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(2) or (a)(3) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following:

- i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from 35 Ill. Adm. Code 218.205, 35 Ill. Adm. Code 218.207, 35 Ill. Adm. Code 218.215, or 35 Ill. Adm. Code 218.216 to 35 Ill. Adm. Code 218.204; the owner or operator of a subject coating line shall certify to the Illinois EPA that the coating line will be in compliance with 35 Ill. Adm. Code 218.204 on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date. The certification shall include:
 - A. The name and identification number of each coating as applied on each coating line;
 - B. 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;
 - C. For coating lines subject to the limitations of 35 Ill. Adm. Code 218.204(c)(2), the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line
 - ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
 - A. 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.
 - B. 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(c), 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. 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. The VOM content limitation with which each fountain solution will comply;
 - D. Initial documentation that each type of fountain solution will comply with the applicable VOM content limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;
 - E. Identification of the method 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(c)(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; and
 - iii. If changing its method of demonstrating compliance with the applicable VOM content limitations in 35 Ill. Adm. Code 218.407, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to 35 Ill. Adm. Code 218.409, certify compliance for such new method in accordance with 35 Ill. Adm. Code 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 35 Ill. Adm. Code 218.407(a).
- c. Pursuant to 35 Ill. Adm. Code 218.411(d), 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. Upon initial start-up of a new lithographic printing line, certify to the Illinois EPA that all cleaning solutions, and the handling of 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) of, and such certification shall also include:

- A. Identification of each VOM-containing cleaning solution used on each lithographic printing line;
 - B. The limitation with which each VOM-containing cleaning solution will comply, i.e., the VOM content or vapor pressure;
 - C. Initial documentation that each VOM-containing cleaning solution will comply with the applicable limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;
 - D. Identification of the method that will be used to demonstrate continuing compliance with the applicable limitations;
 - E. A sample of the records that will be kept pursuant to 35 Ill. Adm. Code 218.411(d)(2); and
 - F. A description of the practices that assure 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; and
 - iii. If changing its method of demonstrating compliance with the requirements of 35 Ill. Adm. Code 218.407(a)(4), or changing between automatic and manual methods of preparing cleaning solutions, certify compliance for such new method in accordance with 35 Ill. Adm. Code 218.411(d)(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 35 Ill. Adm. Code 218.407(a)(4).
- d. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.
- 16a. 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

If you have any questions on this permit, please contact Jocelyn Stakely at 217/782-2113.

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

Date Signed: _____

ECB:JRS:

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the packaging manufacturing 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 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 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>Emission Unit</u>	E M I S S I O N S (Tons/Year)		
	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAPs</u>
3 Non-Heatset Offset Sheetfed Lithographic Presses	18.36		
7 Adhesive Applicators	0.50		
3 Window Package Gluers	<u>1.32</u>	--	--
Totals	<u>20.18</u>	<u>7.90</u>	<u>19.90</u>