

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Vonco Products, Inc.  
Attn: John LaRoi  
201 Park Avenue  
Lake Villa, Illinois 60046

<u>Application No.:</u> 05010027	<u>I.D. No.:</u> 097084AAI
<u>Applicant's Designation:</u>	<u>Date Received:</u> September 30, 2009
<u>Subject:</u> Packaging Printing Facility	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 201 Park Avenue, Lake Villa, 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 three (3) flexographic printing presses controlled by a regenerative thermal oxidizer and six (6) silk screen 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., 100 tons/year for Volatile Organic Material (VOM), 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 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, Emissions 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 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 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- 3a. Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012 except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations which use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;
- b. Pursuant to 35 Ill. Adm. Code 218.187(b), no owner or operator of a source subject to 35 Ill. Adm. Code 218.187, other than manufacturers of coatings, inks, adhesives, or resins, shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.187(b)(1), (b)(2), or (b)(3). No owner or operator of a source that manufactures coatings, inks, adhesives, or resins shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in at least one of the following subsections: 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(3), (b)(4), or (b)(5).
- i. The VOM content of the as-used cleaning solutions (minus water and any compounds that are specifically exempted from the definitions of VOM) does not exceed the following emissions limitations:

Cleaning of ink application equipment:

		<u>kg/l</u>	<u>lb/gal</u>
A.	Flexographic printing that does not print flexible packaging	0.10	0.83
B.	Screen printing, including screen reclamation activities	0.50	4.2

- ii. The composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20°C (68°F);
- c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 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 (Use of Organic Material) shall apply only to photochemically reactive material.
- d. Pursuant to 35 Ill. Adm. Code 218.401(a)(2), no owner or operator of a subject flexographic or rotogravure printing line shall apply at any time any coating or ink unless the VOM content does not exceed the limitation specified in either 35 Ill. Adm. Code 218.401(a)(1) or (a)(2), as applicable. Compliance with 35 Ill. Adm. Code 218.401 must be demonstrated through the applicable coating or ink 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 218.404(c). As an alternative to compliance with 35 Ill. Adm. Code 218.401(a), a subject printing line may meet the requirements of 35 Ill. Adm. Code 218.401(b) or (c). On and after August 1, 2010:
  - i. For owners/operators of flexographic or rotogravure printing lines that do not print flexible packaging, either:
    - A. Forty percent VOM by volume of the coating and ink (minus water and any compounds which are specifically exempted from the definition of VOM); or
    - B. Twenty-five percent VOM by volume of the volatile content in the coating and ink;
  - ii. For 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, either:
    - A. 0.8 kg VOM/kg (0.8 lbs VOM/lb) solids applied; or
    - B. 0.16 kg VOM/kg (0.16 lbs VOM/lb) inks and coatings applied.
- e. Pursuant to 35 Ill. Adm. Code 218.401(c)(1), prior to August 1, 2010, no owner or operator of a subject flexographic or rotogravure printing line equipped with a capture system and control device shall operate

the subject printing line unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.401(c)(1)(A)(i), (c)(1)(A)(ii), or (c)(1)(A)(iii), as well as 35 Ill. Adm. Code 218.401(c)(1)(D), (c)(5), and (c)(6).

- i. An incineration system is used which reduces the captured VOM emissions by at least 90 percent by weight; and
  - ii. The printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 60 percent where a flexographic printing line is employed;
- f. Pursuant to 35 Ill. Adm. Code 218.401(c)(2), on and after August 1, 2010, no owner or operator of a flexographic or rotogravure printing line that does not print flexible packaging and that is equipped with a capture system and control device shall operate the subject printing line unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.401(c)(1)(A)(i), (c)(1)(A)(ii), or (c)(1)(A)(iii), as well as 35 Ill. Adm. Code 218.401(c)(1)(B), (c)(5), and (c)(6);
- g. Pursuant to 35 Ill. Adm. Code 218.401(c)(3)(A), on and after August 1, 2010, no owner or operator of a flexographic or rotogravure printing line that prints flexible packaging and that is equipped with a capture system and control device shall operate the subject printing line unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.401(c)(5) and (c)(6) and the capture system and control device provides an overall reduction in VOM emissions of at least 65 percent in cases in which a subject printing line was first constructed at the subject source prior to March 14, 1995 and utilizes a control device that was first constructed at the subject source prior to January 1, 2010;
- h. Pursuant to 35 Ill. Adm. Code 218.401(c)(4), on and after August 1, 2010, the owner or operator of a flexographic or rotogravure printing line that prints flexible packaging and non-flexible packaging on the same line and that is equipped with a control device shall be subject to the requirements of either 35 Ill. Adm. Code 218.401(c)(1)(B) or (c)(3), whichever is more stringent, as well as 35 Ill. Adm. Code 218.401(c)(5) and (c)(6);
- i. Pursuant to 35 Ill. Adm. Code 218.401(c)(5), the control device is equipped with the applicable monitoring equipment specified in 35 Ill. Adm. Code 218.105(d)(2) and except as provided in 35 Ill. Adm. Code 218.105(d)(3), the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use, and
- j. Pursuant to 35 Ill. Adm. Code 218.401(c)(6), the capture system and control device are operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with 35 Ill. Adm. Code 218.401(c) by using the applicable capture system and control device test methods and procedures specified in 35 Ill. Adm. Code 218.105(c) through 35 Ill. Adm. Code 218.105(f) and by

complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.404(e). The owner or operator of a printing line subject to the requirements in 35 Ill. Adm. Code 218.401(c)(1)(B) or (c)(2) that performed all testing necessary to demonstrate compliance with 35 Ill. Adm. Code 218.401(c)(1)(B) prior to August 1, 2010 is not required to retest pursuant to this 35 Ill. Adm. Code 218.401(c)(6).

- k. Pursuant to 35 Ill. Adm. Code 218.402(d), once subject to the limitations of 35 Ill. Adm. Code 218.401, a flexographic or rotogravure printing line is always subject to the limitations of 35 Ill. Adm. Code 218.401.
- 4a. This permit is issued based on the flexographic printing presses at this 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. 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.
- 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, screen-printing, letterpress, and narrow-web flexographic printing processes are not part of the affected source under 40 CFR 63 Subpart JJJJ.
- 5a. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B)(i), notwithstanding 35 Ill. Adm. Code 218.187(a)(1):
  - i. The following cleaning operations shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
    - A. Stripping of cured coatings, inks, or adhesives, including screen reclamation activities;
    - B. Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;
  - ii. Cleaning operations for emission units within the following source categories shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
    - A. Flexible package printing;
    - B. Paper, film, and foil coating;
- b. 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 emissions limitations in 35 Ill. Adm. Code Part 218 Subpart H (Printing and Publishing). 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. Pursuant to 35 Ill. Adm. Code 218.402(b), upon achieving compliance with 35 Ill. Adm. Code Part 218 Subpart H, the flexographic and rotogravure printing lines are not required to meet 35 Ill. Adm. Code Part 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Flexographic and rotogravure printing lines exempt from 35 Ill. Adm. Code Part 218 Subpart H are subject to 35 Ill. Adm. Code Part 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Rotogravure or flexographic equipment used for both roll printing and paper coating is subject to 35 Ill. Adm. Code Part 218 Subpart H.
- 6a. Pursuant to 35 Ill. Adm. Code 218.187(c), the owner or operator of a subject source shall demonstrate compliance with 35 Ill. Adm. Code 218.187 by using the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.187(g) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.187(e).
- b. Pursuant to 35 Ill. Adm. Code 218.187(d), the owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 218.187 shall comply with the following for each subject cleaning operation. Such requirements are in addition to work practices set forth in 35 Ill. Adm. Code 218.187(b)(4) and (b)(5), as applicable:
  - i. Cover open containers and properly cover and store applicators used to apply cleaning solvents;
  - ii. Minimize air circulation around the cleaning operation;
  - iii. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;
  - iv. Utilize equipment practices that minimize emissions.
- c. 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.

- 7a. 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.
  - b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer such that the regenerative thermal oxidizer is kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
  - c. The afterburner's combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test. This temperature shall be maintained during operation.
- 8a. VOM emissions from flexographic printing presses operations shall not exceed the following limits:

VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
2.5	20.5

These limits are based on maximum material usage, the maximum VOM and HAP content and the printing materials, and credit given for overall reductions in emissions from the use of the regenerative thermal oxidizer. The VOM and HAP emissions shall be determined from the following equation:

$$E = [\Sigma(M_i \times C_i) - W \times C_w] \times (1 - CE)$$

where:

E = VOM or HAP emissions (tons);

M<sub>i</sub> = VOM or HAP-containing raw material usage (tons);

C<sub>i</sub> = VOM or HAP content of the raw material (wt. fraction);

W = certified amount of waste shipped-off (tons);

C<sub>w</sub> = certified VOM or HAP content of the waste (wt.fraction);

Value of C<sub>w</sub> for the current reporting period shall be used from the most recent waste shipment. Upon receiving updated C<sub>w</sub> for the reporting period emissions shall be recalculated.

CE = overall control efficiency of the capture system and control device demonstrated during the most recent stack test.

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

- b. VOM emissions from and operation of the six silk screen printing presses shall not exceed the following limits: 2.0 tons/year.

VOM Usage		VOM Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
0.25	2.0	0.25	2.0

These limits are based on maximum material usage, and the maximum VOM and HAP content. The emissions shall be determined from the following equation on a monthly basis:

$$E = \Sigma (M_i \times C_i) - \Sigma (W_j \times C_j)$$

Where:

E = VOM/HAP emissions (tons);

M<sub>i</sub> = VOM/HAP-containing raw material usage (tons);

C<sub>i</sub> = VOM/HAP content of the raw material (wt. fraction);

W<sub>j</sub> = Waste material shipped off-site (tons); and

C<sub>j</sub> = VOM/HAP content of the waste material (wt. fraction)

- c. The emissions of Hazardous Air Pollutants (HAP) 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 requirements to obtain a Clean Air Act Permit Program Permit (CAAPP) permit and the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.
- 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).
- 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 218.187(g)(1), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA, or as otherwise specified in 35 Ill. Adm. Code 218.187. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during the testing;
- b. Pursuant to 35 Ill. Adm. Code 218.187(g)(2), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.187(b)(1), and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted 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 cleaning solvents 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. In the event of any inconsistency between a Method 24 test and the manufacturer's specifications, the Method 24 test shall govern;
- c. Pursuant to 35 Ill. Adm. Code 218.187(g)(3), 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. Code 218.110;

- b. 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.
- 11a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator that uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitor equipment which is installed, calibrated, maintained, and operated in according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor for each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.
- b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of  $\pm 1$  percent of the temperature measured in degrees Celsius or  $\pm 0.5^\circ$  C, whichever is greater.
12. 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.

13a. Pursuant to 35 Ill. Adm. Code 218.187(e)(3), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(1) shall collect and record the following information for each cleaning solution used:

- i. For each cleaning solution 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;
  - 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 which is not prepared at the source with automatic equipment:
  - A. The name and identification of each cleaning solution;
  - B. Date, time of preparation, and each subsequent modification of the batch;
  - C. The VOM content of each cleaning solvent in the cleaning solution;
  - 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 not prepared at the site but 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);

- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(4), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(2) shall collect and record the following information for each cleaning solution used:
  - i. The name and identification of each cleaning solution;
  - ii. Date, time of preparation, and each subsequent modification of the batch;
  - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
  - iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
  - v. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
- c. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
- d. Pursuant to 35 Ill. Adm. Code 218.404(c)(2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) 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 and ink as applied on each printing line.
  - ii. The VOM content of each coating and ink as applied each day on each printing line.
- e. Pursuant to 35 Ill. Adm. Code 218.404(e)(2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(c) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(c) shall collect and

record all of the following information each day for each printing line and maintain the information at the facility for a period of three years:

- i. Control device monitoring data.
  - ii. A log of operating time for the capture system, control device, monitoring device and the associated printing line.
  - iii. A maintenance log for the capture system, control device and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- 14a. The Permittee shall maintain monthly records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the regenerative thermal oxidizer:
    - A. Records for periodic inspection of the regenerative thermal oxidizer with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
  - ii. Amount of each VOM or HAP containing material used in the printing and clean-up operations (tons/month, tons/year);
  - iii. VOM and HAP content of each material used in printing and clean-up operations (weight percent);
  - iv. Certified amount of waste shipped-off (tons/month, tons/year) and its VOM and HAP content (weight percent); 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 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 the Illinois EPA or USEPA request for records during the course of a source inspection.
- 15a. Pursuant to 35 Ill. Adm. Code 218.187(e)(2)(B), all sources subject to the requirements of 35 Ill. Adm. Code 218.187 shall: At least 30 calendar days before changing the method of compliance between 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(4), or (b)(5) and 35 Ill. Adm.

Code 218.187(b)(3), notify the Illinois EPA in writing of such change. Such notification shall include a demonstration of compliance with the newly applicable subsection;

- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(9), all sources subject to the requirements of 35 Ill. Adm. Code 218.187(b) and (d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.187(b) or (d) by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation;
- c. Pursuant to 35 Ill. Adm. Code 218.404(c)(3), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Illinois EPA in the following instances:
  - i. Any record showing violation of 35 Ill. Adm. Code 218.401(a) 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 with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(a) to 35 Ill. Adm. Code 218.401(b) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(d)(1) or (e)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(a) to 35 Ill. Adm. Code 218.401(b) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(d) or (e), respectively.
- d. Pursuant to 35 Ill. Adm. Code 218.404(e)(3), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(c) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Illinois EPA in the following instances:
  - i. Any record showing violation of 35 Ill. Adm. Code 218.401(c), 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 with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(c) to 35 Ill. Adm. Code 218.401(a) or (b), the owner or operator shall comply with all requirements 35 Ill. Adm. Code 218.404(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm.

Code 218.401(c) to 35 Ill. Adm. Code 218.401(a) or (b), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(c) or (d), respectively.

- e. 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.
- 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 exceedances 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, please call Valeriy Brodsky at 217/785-1705.

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

Date Signed: \_\_\_\_\_

REP:VJB:

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the packaging 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 VOM, 10 tons/year for any single HAP, and 25 tons/year for any combinations 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>	<u>Emissions (Tons/Year)</u>		
	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Flexographic Printing Presses	20.5		
Silk Screen Printing Presses	<u>2.0</u>	<u>--</u>	<u>--</u>
Total Plant-Wide	22.5	9.0	22.5

VJB: