

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Bema Inc.  
Attn: Glen Galloway  
744 North Oaklawn Avenue  
Elmhurst, Illinois 60126

<u>Application No.:</u> 95100130	<u>I.D. No.:</u> 043035ACX
<u>Applicant's Designation:</u>	<u>Date Received:</u> May 12, 2005
<u>Subject:</u> Flexographic Packaging Printing Facility	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 744 North Oaklawn Avenue, Elmhurst, DuPage County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one (1) 10-color flexographic printing presses (Press #2) controlled by a regenerative thermal oxidizer (RTO) and one solvent distillation unit 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)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
    - ii. To limit emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year to less than 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205, except reporting requirements of 35 Ill. Adm. Code 205.300 which are described in Attachment B.
  - 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.

- c. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- b. Pursuant to 35 Ill. Adm. Code 218.401(a)(2)(B), on and after August 1, 2010 no owner or operators 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). 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:
  - i. 0.8 kg VOM/kg (0.8 lbs VOM/lb) solids applied; or
  - ii. 0.16 kg VOM/kg (0.16 lbs VOM/lb) inks and coatings applied.
- c. Pursuant to 35 Ill. Adm. Code 218.401(b)(3), on and after August 1, 2010, no owner or operator of a subject flexographic or rotogravure printing line that prints flexible packaging or that prints flexible packaging and non-flexible packaging on the same line, shall apply coatings or inks on the subject printing line unless the weighted average, by weight, VOM content of all coatings and inks as applied

each day on the subject printing line does not exceed the limitation specified in either 35 Ill. Adm. Code 218.401(a)(2)(B)(i) (calculated in accordance with the equation in 35 Ill. Adm. Code 218.401(b)(3)(A)) or 35 Ill. Adm. Code 218.401(a)(2)(B)(ii) (calculated in accordance with the equation in 35 Ill. Adm. Code 218.401(b)(3)(B)). Compliance with 35 Ill. Adm. Code 218.401(b)(3) shall 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(d).

- d. Pursuant to 35 Ill. Adm. Code 218.401(c)(3)(C), 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 75 percent when a subject printing line was first constructed at the subject source on or after March 14, 1995 and utilizes a control device that was first constructed at the subject source prior to January 1, 2010.
- e. 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).
- 5a. 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. Pursuant to 40 CFR 63.820(a)(1), the provisions of 40 CFR 63 Subpart KK apply to each new and existing facility that is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated,
- 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 63.3290, the provisions of 40 CFR 63 Subpart JJJJ apply to each new and existing facility that is a major source of HAP, as defined in 40 CFR 63.2, at which web coating lines are operated.
- 6a. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B)(ii), notwithstanding 35 Ill. Adm. Code 218.187(a)(1) cleaning operations for emission units within the flexible package printing source category shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (f), and (g).
- 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 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. 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.
- d. Pursuant to 35 Ill. Adm. Code 218.402(c), upon achieving compliance with 35 Ill. Adm. Code 218 Subpart H, the flexographic and rotogravure printing lines are not required to meet 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Flexographic and rotogravure printing lines exempt from 35 Ill. Adm. Code 218 Subpart H are subject to 35 Ill. Adm. Code 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 218 Subpart H.
- e. This permit is issued based on the solvent distillation unit not being subject to 35 Ill. Adm. Code 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(b)(1)(A), a source is subject to 35 Ill. Adm. Code 218 Subpart TT if it has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from emission units, other than furnaces at glass container manufacturing sources and VOM leaks from components, that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T, (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB.
- 7a. 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.
- 8a. 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 of 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 35 Ill. Adm. Code 218.401(c)(6). The owner or operator of a printing line subject to the requirements in 35 Ill. Adm. Code 218.401(c)(3) shall perform testing in compliance with 35 Ill. Adm. Code 218.401(c)(6), even if the owner or operator already performed such testing prior to August 1, 2010, unless the following conditions are met. Nothing in Ill. Adm. Code

218.401(c)(6), however, shall limit the Illinois EPA's ability to require that the owner or operator perform testing pursuant to 35 Ill. Adm. Code 201.282:

- i. On or after May 1, 2000, the owner or operator of the subject printing line performed all testing necessary to demonstrate compliance with 35 Ill. Adm. Code 218.401(c)(1)(B);
  - ii. Such testing also demonstrated an overall control efficiency equal to or greater than the applicable control efficiency requirements in 35 Ill. Adm. Code 218.401(c)(3);
  - iii. The owner or operator submitted the results of such tests to the Illinois EPA, and the tests were not rejected by the Illinois EPA;
  - iv. The same capture system and control device subject to the tests referenced in 35 Ill. Adm. Code 218.401(c)(6)(A) is still being used by the subject printing line; and
  - v. The owner or operator complies with all recordkeeping and reporting requirements in 35 Ill. Adm. Code 218.404(e)(1)(B).
- b. 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.
- c. Pursuant to 35 Ill. Adm. Code 218.403(f), no owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, shall operate the printing line on or after August 1, 2010, unless the owner or operator has complied with, and continues to comply with, 35 Ill. Adm. Code 218.401(d) and 35 Ill. Adm. Code 218.404(g).
- d. Pursuant to 35 Ill. Adm. Code 218.403(g), no owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, and that is exempt from the limitations of 35 Ill. Adm. Code 218.401(d) because of the criteria in 35 Ill. Adm. Code 218.402(b) shall operate the printing line on or after August 1, 2010, unless the owner or operator has complied with, and continues to comply with, 35 Ill. Adm. Code 218.402(b) and 35 Ill. Adm. Code 218.404(f).
- 9a. 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 (RTO) such that the regenerative thermal oxidizer (RTO) 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, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
- 10a. Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205.
- b. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.
  - c. The dryer associated with Press No. 2 and the thermal oxidizer shall only be operated with natural gas as the fuel. The use of any other fuel in the dryer associated with Press No. 2 or the thermal oxidizer requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 11a. VOM emissions from the printing press operations shall not exceed the following limits:

<u>Emission Unit</u>	<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Printing Press No. 2	1.77	17.70

These limits are based on the maximum emission rate based on the maximum material usage and compliance with 35 Ill. Adm. Code 218.401(c). The VOM and HAP emissions shall be determined from the following equation:

$$E = \Sigma(M_i \times C_{M_i} \times d_{M_i}) \times (1 - CE) / 2,000$$

where:

E = VOM/HAP emissions (tons);

M<sub>i</sub> = Inks and coatings usage (gal);

C<sub>M<sub>i</sub></sub> = VOM/HAP content of the ink or coating (% by weight);

$d_{Mi}$  = Density of ink or coating (lbs/gal); and

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

- b. Emissions and operation of the solvent distillation unit shall not exceed the following limits:

<u>Emission Unit</u>	<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Solvent distillation unit	0.13	1.30

These limits are based on the maximum emissions of the solvent distillation unit. The VOM emission shall be determined from the following equation:

$$E = \Sigma[(S \times C_s) - (SB \times C_{SB})]/2,000$$

where:

E = VOM emissions (tons);

S = Amount of cleaning solvent used in the printing operations (gal);

$C_s$  = VOM content of the solvent (lb/gal);

SB = certified amount of still bottom waste shipped-off (gal);

$C_{SB}$  = certified VOM content of the still bottom waste (lb/gal);

- c. Emissions and operation of the press dryer and regenerative thermal oxidizer (RTO) shall not exceed the following limits:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lbs/mmScf)</u>	<u>(lb/Hr)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	0.38	1.66
Nitrogen Oxides (NO <sub>x</sub> )	100.0	0.45	1.97
Particulate Matter (PM)	7.6	0.03	0.15
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.01
Volatile Organic Material (VOM)	5.5	0.02	0.11

These limits are based on the maximum firing rate of the RTO (4.0 mmBtu/hour) and the dryer associated with Press 2 (0.5 mmBtu/hour), a maximum of 8,760 hours/year of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- 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).

12. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.
- 13a. 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 Conditions 14 and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
14. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
15. 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.

- 16a. 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 monitoring equipment which is installed, calibrated, maintained, and operated 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.
  - c. 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.
17. 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.

18. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 19a. Pursuant to 35 Ill. Adm. Code 218.404(c)(2), 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.
- b. Pursuant to 35 Ill. Adm. Code 218.404(d)(2), 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(b) shall collect and record all of the following information each day 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, or weight of solids, as applicable, of each coating and ink as applied each day on each printing line.
  - iii. The daily-weighted average VOM content of all coatings and inks as applied on each printing line.
- c. Pursuant to 35 Ill. Adm. Code 218.404(e)(2), 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 equipment and the associated printing line.
  - iii. A maintenance log for the capture system, afterburner, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- d. 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.
- 20a. The Permittee shall maintain 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 (RTO):
    - A. Records for periodic inspection of the regenerative thermal oxidizer (RTO) 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-containing material used on the printing presses and clean-up operations (gallons/month, gallons/year);
  - iii. VOM content of each VOM-containing material used in printing and clean-up operations (% by weight);
  - iv. Density of each VOM-containing material used in printing and clean-up operations (lbs/gallon);
  - v. Amount of waste solvent introduced in the solvent distillation unit (gallons/month and gallons/year);
  - vi. Certified amount of still bottom waste shipped-off (gallons/month, gallons/year) and its VOM content (lbs/gallon);
  - v. Natural gas combusted in the RTO (mmscf/month and mmscf/year); and
  - vi. Monthly and annual CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions, with supporting calculations (tons/month, tons/year).
- b. The Permittee shall maintain the following records to determine compliance with the 15 tons VOM/ozone season limitation specified in Condition 10:

- i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- c. 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.
21. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 22a. Pursuant to 35 Ill. Adm. Code 218.404(c), 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:
- i. By a date consistent with 35 Ill. Adm. Code 218.106, or Section 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance from an existing subject printing line from 35 Ill. Adm. Code 218.401(b) or 35 Ill. Adm. Code 218.401(c) of this Part to Section 218.401(a), the owner or operator of a subject printing line shall certify to the Illinois EPA that the printing line will be in compliance with 35 Ill. Adm. Code 218.401(a) 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 requirements in 35 Ill. Adm. Code 218.401(a)(2)(B) shall certify in accordance with this 35 Ill. Adm. Code 218.404(c)(1) even if the owner or operator of such line submitted a certification prior to January 1, 2010. Such certification shall include:

- A. The name and identification number of each coating and ink as applied on each printing line.
  - B. The VOM content of each coating and ink as applied each day on each printing line.
- ii. 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:
- A. 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.
  - B. 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.
- b. Pursuant to 35 Ill. Adm. Code 218.404(d)(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(b) shall comply with the following:
- i. By a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing subject printing line from 35 Ill. Adm. Code 218.401(a) or (c) to 35 Ill. Adm. Code 218.401(b), the owner or operator of the subject printing line shall certify to the Illinois EPA that the printing line will be in compliance with 35 Ill. Adm. Code 218.401(b) 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 requirements in 35 Ill. Adm. Code 218.401(b)(3) shall certify in accordance with 35 Ill. Adm. Code 218.404(d)(1) even if the owner or operator of such line submitted a certification prior to January 1, 2010. Such certification shall include:
- A. The name and identification number of each printing line which will comply by means of 35 Ill. Adm. Code 218.401(b).
  - B. The name and identification number of each coating and ink available for use on each printing line.

- C. The VOM content of each coating and ink as applied each day on each printing line.
  - D. The method by which the owner or operator will accurately calculate the volume, or weight of solids, as applicable, of each coating and ink as applied each day on each printing line.
  - E. The method by which the owner or operator will create and maintain records each day as required in 35 Ill. Adm. Code 218.404(d) (2) .
  - F. An example of the format in which the records required in 35 Ill. Adm. Code 218.404(d) (2) will be kept.
- ii. 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:
- A. Any record showing violation of 35 Ill. Adm. Code 218.401(b) 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 with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(b) to 35 Ill. Adm. Code 218.401(a) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(c) (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(b) to 35 Ill. Adm. Code 218.401(a) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(c) or (e), respectively.
- c. Pursuant to 35 Ill. Adm. Code 218.404(e), 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(b) shall comply with the following:
- i. By a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from 35 Ill. Adm. Code 218.401(a) or (b) to 35 Ill. Adm. Code 218.401(c), the owner or operator of the subject printing line shall either:
    - A. Perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with 35 Ill. Adm. Code 218.401(c) 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; or
- B. If not required to perform such testing pursuant to 35 Ill. Adm. Code 218.401(c) (6), submit a certification to the Illinois EPA that includes:
    - I. A declaration that the owner or operator is not required to perform testing pursuant to 35 Ill. Adm. Code 218.401(c) (6);
    - II. The dates that testing demonstrating compliance with 35 Ill. Adm. Code 218.401(c) (3) was performed; and
    - III. The dates that the results of such testing were submitted to the Illinois EPA.
  - ii. 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:
    - A. 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.
    - B. 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 of 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.
  - iii. By August 1, 2010, or upon initial start-up of a new printing line, whichever is later, the owner or operator of a printing line subject to the requirements in 35 Ill. Adm. Code 218.401(c) (3) or (c) (4) shall submit to the Illinois EPA records documenting the date the printing line was constructed at the subject source and the date the control device for such printing line was constructed at the subject source.
  - d. Pursuant to 35 Ill. Adm. Code 218.404(f), any owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, and that is exempt from the limitations of 35 Ill. Adm. Code 218.401(d) because of the criteria in 35 Ill. Adm. Code 218.402(b) shall:

- i. By August 1, 2010, or upon initial start-up of a new printing line, whichever is later, and upon modification of a printing line, submit a certification to the Illinois EPA that includes:
  - A. A declaration that the source is exempt from the requirements in 35 Ill. Adm. Code 218.401(d) because of the criteria in 35 Ill. Adm. Code 218.402(b);
  - B. Calculations that demonstrate that combined emissions of VOM from all flexographic and rotogravure printing lines (including inks and solvents used for cleanup operations associated with such printing lines) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment; and
- ii. Notify the Illinois EPA in writing if the combined emissions of VOM from all flexographic and rotogravure printing lines (including inks and solvents used for cleanup operations associated with the flexographic and rotogravure lines) at the source ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs.
- e. Pursuant to 35 Ill. Adm. Code 218.404(g), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401(d) shall:
  - i. By August 1, 2010, or upon initial start-up of a new printing line, whichever is later, submit a certification to the Illinois EPA describing the practices and procedures that the owner or operator will follow to ensure compliance with the limitations of 35 Ill. Adm. Code 218.401(d); and
  - ii. 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.
- f. 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.
- 23a. 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. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by October 31 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 Ill. Adm. Code 205.205(a) and 35 Ill. Adm. Code 205.300.
- c. 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 217/782-2113.

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

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

ECB: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) 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.

E M I S S I O N S (Tons/Year)					
<u>Emission Unit</u>	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>
Printing Press No. 2					<u>17.70</u>
Solvent Distillation Unit					<u>1.30</u>
Fuel Combustion	<u>1.66</u>	<u>1.97</u>	<u>0.15</u>	<u>0.01</u>	<u>0.11</u>
Totals	<u>1.66</u>	<u>1.97</u>	<u>0.15</u>	<u>0.01</u>	<u>19.11</u>

VJB:

Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' FESOP or CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205.

3. Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures, which may be specified in this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by October 31 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 Ill. Adm. Code 205.205(b) and 35 Ill. Adm. Code 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and shall immediately comply with 35 Ill. Adm. Code Part 205, including holding allotment trading units (ATUs) for its VOM emissions during the first seasonal allotment period it exceeds 15 tons and each seasonal allotment period, thereafter, pursuant to 35 Ill. Adm. Code 205.150(c).