

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Deluxe Manufacturing Operations, Inc.  
Attn: Cheryl Thompson  
1600 East Touhy Avenue  
Des Plaines, Illinois 60018

Application No.: 93020005                      I.D. No.: 031063AFT  
Applicant's Designation: PLANT#0251              Date Received: February 20, 2009  
Subject: Tinters, Plate Setters, and Presses  
Date Issued: May 19, 2009                      Expiration Date: September 9, 2010  
Location: 1600 East Touhy Avenue, Des Plaines, Cook County, 60018

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

Forty- two (42) non-heatset web lithographic presses;  
Forty-six (46) sheetfed non-heatset lithographic presses;  
Three (3) flexographic printing presses;  
Eleven (11) paper tinting flexographic presses;  
Eight (8) paper plate-making units;  
Five (5) foil applicators;  
One (1) UV lithographic web press; and  
Two (2) gas-fired boilers

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM) and 10 tons/year for 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 permit production and operating limitations, which restrict the potential to emit for VOM flexographic printing operations to less than 25 tons per year so that the flexographic presses are not subject to the requirements of 35 Ill. Adm. Code 218.401 (Flexographic and Rotogravure Prting).
- b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(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. The emission limitations are as follows:

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

Note: The paper coating limitation 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.

- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
- c. Pursuant to 35 Ill. Adm. Code 218.407(a)(2), cause or allow the operation of any non-heatset web offset lithographic printing line unless the VOM content of the as-applied fountain solution is 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol;
- d. Pursuant to 35 Ill. Adm. Code 218.407(a)(3), no owner or operator of lithographic printing line(s) subject to the requirements of 35 Ill. Adm. Code 218 Subpart H shall cause or allow the operation of any sheet-fed offset lithographic printing line unless:
- i. The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or
  - ii. The VOM content of the as-applied fountain solution is 8.5 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;

- e. Pursuant to 35 Ill. Adm. Code 218.407(a)(4), no owner or operator of lithographic printing lines subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart H shall cause or allow the use of a cleaning solution on any lithographic printing line unless:
  - i. The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or
  - ii. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F).
- f. Pursuant to 35 Ill. Adm. Code 218.407(a)(5), no owner or operator of lithographic printing lines subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart H shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers.
- 3. This permit is issued based upon 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. This is a result of the federally enforceable production and operating limitations established in Construction Permit 09020041, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
- 4a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in 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, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
- c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal

allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.

- 5a. 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 upon the source not being subject to the requirements of 35 Ill. Adm. Code 218.401, Flexographic and Rotogravure Printing. This is a result of the federally enforceable production and operating limitations of this permit, which restrict the maximum theoretical emissions of VOM from this facility to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year.
- 6. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.
- 7a. Emissions of volatile organic material, VOM, and operation of the 42 non-heatset web offset lithographic presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(lbs/Month)</u>	<u>(Tons/Year)</u>
Ink	1.80	14.40	180	0.72
Fountain Solution	0.23	1.80	450	1.80
Clean-Up Solvent	2.41	19.30	2,412	9.65
			Total:	12.17

These limits are based on maximum material usage, VOM content for each individual ink, fountain solution and solvent, 95 percent ink retention, and 50 percent retention of the clean up solvents in rags stored in closed containers that are sent off site if vapor pressure is less than 10 mmHg at 68°F.

- b. Emissions of volatile organic material, VOM, and operation of the 46 sheetfed non-heatset lithographic presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(lbs/Month)</u>	<u>(lbs/Year)</u>	<u>(lbs/Month)</u>	<u>(Tons/Year)</u>
Non-Heatset Ink	1,160	9,280	57.5	0.23
Fountain Solution	165	1,322	165.0	0.66
Clean-Up Solvent	1,151	9,204	575.0	2.30
Minus Waste Shipped Off-Site	(129.6)	(1,086)	(129.6)	(0.54)
			Total:	2.65

These limits are based on maximum material usage, VOM content for each individual ink, fountain solution and solvent, and material balance. A credit of 50% VOM retention may be used if cleaning solvents have vapor pressure less than 10 mmHg at 68°F and used cleaning towels are stored in closed containers and sent off-site. Emission reduction credit is given to approximately 27% of the high VOM clean up solvent which remains as liquid hazardous waste (6 lbs VOM/gallon) and is shipped off site for disposal.

- c. Emissions of volatile organic material, VOM, and operation of the 3 flexographic presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(lbs/Month)</u>	<u>(Tons/Year)</u>
Ink	0.29	1.92	580	1.92
Clean Up-Solvent	0.045	0.30	90	0.30
		Total	670	2.22

These limits are based on maximum material usage and VOM content for each individual ink and solvent.

- d. Emissions of volatile organic material, VOM, and operation of the 11 paper tinting units shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(lbs/Month)</u>	<u>(Tons/Year)</u>
Ink	0.33	2.64	658	2.63
Clean Up-Solvent	0.01	0.11	28	0.11
		Total:	686	2.74

These limits are based on maximum material usage and VOM content for each individual ink and solvent.

- e. Emissions of volatile organic material, VOM, and operation of the 8 paper plate-making units shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Emissions</u>	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(Lbs/Month)</u>	<u>(Tons/Year)</u>
Toner	306	3,060	900	4.5

These limits are based on maximum material usage and maximum VOM content. Emission reduction credit is given to approximately 56% of the toner which remains as liquid hazardous waste (6 lbs VOM/gallon) and is shipped off site for disposal.

- f. Emissions from and operation of the 2 gas fired boilers (12.554 and 10.461 mmBtu/hour) shall not exceed the following limits:

<u>Total Max. Firing Rate (mmBtu/Hour)</u>	<u>Pollutant</u>	<u>Emission Factor (lbs/mmBtu)</u>	<u>Emissions</u>	
			<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
23	NO <sub>x</sub>	0.098	1.0	9.9

CO	0.082	0.83	8.3
PM	0.0075	0.08	0.8
VOM	0.0054	0.06	0.6
SO <sub>2</sub>	0.0006	0.006	0.06

These limits define the maximum emissions of NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM and are based on standard AP-42 emission factors and continuous operation (8,760 hours/year).

- g. Emissions of volatile organic material, VOM, and operation of the 5 foil applicators shall not exceed the following limits:

<u>Material</u>	<u>Film transferred</u>		<u>Emission</u>	<u>VOM Emissions</u>	
	<u>(lb/Mo)</u>	<u>(lb/Yr)</u>	<u>Factor</u>	<u>(Lbs/Mo)</u>	<u>(Tons/Yr)</u>
Metalized Film	0.03	0.11	1.5	30	0.18

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

- h. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit or the NESHAP for the Printing and Publishing Industry, 40 CFR 63, Subpart KK.
- i. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 8a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of

air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 9a. Pursuant to 35 Ill. Adm. Code 218.211(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 218.404(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.
- c. 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 operator 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.
- d. 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 determined compliance.

- e. 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. Code 218.110.
- 10a. Pursuant to 35 Ill. Adm. Code 218.410(a), Fountain Solution Temperature:
  - i. The owner or operator of any lithographic printing line(s) relying on the temperature of the fountain solution to demonstrate compliance shall install, maintain, and continuously operate a temperature monitor of the fountain solution in the reservoir or fountain tray, as applicable.
  - ii. The temperature monitor must be capable of reading with an accuracy of 1°C or 2°C, and must be attached to an automatic, continuous recording device such as a strip chart, recorder, or computer, with at least the same accuracy, that is installed, calibrated and maintained in accordance with the manufacturer's specifications. If the automatic, continuous recording device malfunctions, the owner or operator shall record the temperature of the fountain solution at least once every two operating hours. The automatic, continuous recording device shall be repaired or replaced as soon as practicable.
- b. Pursuant to 35 Ill. Adm. Code 218.410(b), the owner or operator of any lithographic printing line(s) subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) or (a)(3) shall:
  - i. For a fountain solution to which VOM is not added automatically:
    - A. Maintain records of the VOM content of the fountain solution in accordance with 35 Ill. Adm. Code 218.411(c)(2)(C); or
    - B. Take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:
      - I. With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with

manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain solution prepared or modified, whichever is longer; or

- II. With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications.
- ii. For fountain solutions to which VOM is added at the source with automatic feed equipment, determine the VOM content of the as-applied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level. Records must be retained of the VOM content of the fountain solution in accordance with 35 Ill. Adm. Code 218.411(c)(2)(D). The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications.
- c. Pursuant to 35 Ill. Adm. Code 218.410(e), Cleaning Solution:
- i. The owner or operator of any lithographic printing line relying on the VOM content of the cleaning solution to comply with 35 Ill. Adm. Code 218.407(a)(4)(A) must:
    - A. For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
      - I. Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and
      - II. Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water

(or other non-VOM), as applied, comply with 35 Ill. Adm. Code 218.407(a)(4)(A).

- B. For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in 35 Ill. Adm. Code 218.411(d)(2).
    - ii. The owner or operator of any lithographic printing line relying on the vapor pressure of the cleaning solution to comply with 35 Ill. Adm. Code 218.407(a)(4)(B) must keep records for such cleaning solutions used on any such line(s) as set forth in 35 Ill. Adm. Code 218.411(d)(2)(C).
11. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- 12a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 of and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record 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 the coating lines.

- 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 the coating lines.
- b. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), the owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating and ink as applied on each printing line.
  - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
- c. 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. 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 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 limits 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.
- d. 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 prepared 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. 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 contains, with descriptions of actual practice and corrective action taken, if any;
- 13a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Amount of each ink, fountain solution, and cleaning solvent used in the imprinting operation (tons/month and tons/year);
  - ii. VOM and HAP content of each ink, fountain solution, and cleaning solvent used (lbs VOM/gallon or percent weight);
  - iii. Certified amount of waste shipped-off (lb/month and lbs/year) and its VOM content (% by weight); and
  - iv. Monthly and annual CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAP emissions from the source, with supporting calculations (tons/month, tons/year).
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
- i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, 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 that may be specified in this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- 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.

14a. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:

- i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
- ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), respectively. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), respectively.

b. Pursuant to 35 Ill. Adm. Code 218.404(b)(3), any owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.

c. 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. 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
- ii. 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(s) 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. 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
  - ii. 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).

15a. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

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

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

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

It should be noted this permit has been revised so as to include the equipment described in Construction Permit #09020041.

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

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

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

ECB:JRS:jws

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the commercial printing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons/year for 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)						Single <u>HAP</u>	Total <u>HAPs</u>
	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>			
42 Non-Heatset Presses					12.17			
46 Sheetfed Presses					<u>2.65</u>			
3 Flexographic Presses					<u>2.22</u>			
11 Tinting Units					<u>2.74</u>			
8 Plate-Makers					<u>4.50</u>			
5 Foil Applicators					<u>0.18</u>			
2 Boilers	<u>8.30</u>	<u>9.90</u>	<u>0.80</u>	<u>0.06</u>	<u>0.60</u>	--	--	
Totals	8.30	9.90	0.80	0.06	25.06	7.9	19.9	

JRS:jws