217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Hess Print Solutions
Attn: Jeff Menolascino
1530 McConnell Road
Woodstock, Illinois 60098

Application No.: 04080004
Applicant's Designation: SHFDPRESS
Subject: Lithographic Printing Presses
Date Issued: December 22, 2011
Location: 1530 McConnell Road, Woodstock, McHenry County

I.D. No.: 111095ABK
Date Received: September 20, 2010
Expiration Date: December 22, 2016

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of three (3) heatset web offset lithographic printing presses (#1, 2 and 3) controlled by a catalytic oxidizer (MCO-12), one (1) heatset web offset lithographic printing press (#4) controlled by a catalytic oxidizer (MCO-9) and one (1) sheet-fed non-heatset offset lithographic printing press pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM), 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for any combination of such HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.

ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.

iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

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 meter (1000 foot) 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 source 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 this 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.407(a), no owner or operator of lithographic printing line(s) subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart H shall:

i. Cause or allow the operation of any heatset web offset lithographic printing line unless:

A. The total VOM content in the as-applied fountain solution meets one of the following conditions:

I. 1.6 percent or less, by weight;

II. 3 percent or less, by weight, and the temperature of the fountain solution is maintained below 15.6°C

(60°F), measured at the reservoir or the fountain tray; or

III. 5 percent or less, by weight, and the as-applied fountain solution contains no alcohol;

B. The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;

C. An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer exhausts are reduced on and after August 1, 2010, by at least 90 percent, by weight, for afterburners first constructed at the source prior to January 1, 2010; by at least 95 percent, by weight, for afterburners first constructed at the source on or after January 1, 2010; or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);

D. The afterburner complies with all monitoring provisions specified in 35 Ill. Adm. Code 218.410(c); and

E. The afterburner is operated at all times when the printing line is in operation, except the afterburner may be shut down between November 1 and April 1 as provided in 35 Ill. Adm. Code 218.107;

ii. Cause or allow the operation of any sheet-fed offset lithographic printing line unless:

A. The VOM content of the as-applied fountain solution is 5 percent or less, by weight; or

B. The VOM content of the as-applied fountain solution is 8.5 percent or less, by weight, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;

iii. Cause or allow the use of a cleaning solution on any lithographic printing line unless:

A. The VOM content of the as-used cleaning solution is less than or equal to:

I. 30 percent, by weight; or

II. On and after August 1, 2010, for owners or operators of sources that meet the applicability criteria in 35 Ill. Adm. Code 218.405(c)(3) and do not certify pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B) that the source will not make use of any of the exclusions

in 35 Ill. Adm. Code 218.405(c)(3), 70 percent, by weight; or

B. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F).

iv. Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers, except when specifically in use.

5. 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. This permit is issued based on the source not being subject to 35 Ill. Adm. Code 218.187 (Other Industrial Solvent Cleaning Operations). Pursuant to 35 Ill. Adm. Code 218.187(a)(2), notwithstanding 35 Ill. Adm. Code 218.187(a)(1):

i. Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (f), and (g):

ii. Cleaning operations for emission units within the lithographic printing source categories shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (f), and (g);

iii. Cleaning of metering rollers, dampening rollers, and printing plates shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (f), and (g);

b. This permit is issued based on the heatset web printing presses, and the sheetfed non-heatset lithographic presses at this source not being subject to 35 Ill. Adm. Code 218.204(c) (Paper Coating). Pursuant to 35 Ill. Adm. Code 218.204(c)(3), the paper coating limitation set forth in 35 Ill. Adm. Code 218.204(c) shall not apply to any owner or operator of any paper coating line on which flexographic rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in 35 Ill. Adm. Code 218 Subpart H. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT. On and after May 1, 2011, the paper coating limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.

c. Pursuant to 35 Ill. Adm. Code 218.405(c)(3), notwithstanding 35 Ill. Adm. Code 218.405(c)(2), at sources where the combined emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) equal or exceed 6.8 kg/day (15 lbs/day) but do not exceed 45.5 kg/day (100 lbs/day), calculated in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B), before the application of capture systems and control devices, the following exclusions shall apply unless the owner or operator of the source certifies pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B) that the source will not make use of any such exclusions:

i. The requirements of 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), and (a)(3) shall not apply to lithographic printing lines with a total fountain solution reservoir of less than 3.8 liters (1 gallon);

ii. The requirements of 35 Ill. Adm. Code 218.407(a)(3) shall not apply to sheet-fed offset lithographic printing lines with maximum sheet size of 11x17 inches or smaller;

iii. The requirements of 35 Ill. Adm. Code 218.407(a)(4) shall not apply to up to a total of 416.3 liters (110 gallons) per year of cleaning materials used on all lithographic printing lines at the source;

iv. The requirements of 35 Ill. Adm. Code 218.407(a)(4)(A)(i) shall not apply to lithographic printing lines at the source. Instead, the requirements of 35 Ill. Adm. Code 218.407(a)(4)(A)(ii) shall apply to such lines.

7a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

b. The catalytic oxidizers combustion chambers shall be preheated to at least the manufacturer’s recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test. This temperature shall be maintained during operation.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the catalytic oxidizers such that the catalytic oxidizers are kept in proper working condition and not cause a violation the Environmental Protection Act or regulations promulgated therein.

8a. Emissions and operation of the printing operations at this source shall not the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
2.00	17.20

These limits are based on the maximum production rate and credits for VOM emissions capture by and retentions allowed by CTG for Offset Lithographic Printing EPA-453/R-06-002. The VOM and HAP emissions shall be calculated using the following equations:

i. From the heatset printing presses:

$$E = \sum[I_i \times V_{Ii} \times 0.8 \times (1\text{-}CE)] + \sum[FS_j \times V_{FSj} \times (1\text{-}0.7 \times CE)] + \sum[CS_k \times V_{CSk} \times (1\text{-}0.4 \times CE)] + \sum[CS_l \times V_{CSl} \times 0.5] + \sum(S_n \times V_{Sn});$$

ii. From the non-heatset printing press:

$$E = \sum(I_m \times V_{Im} \times 0.05) + \sum[CS_l \times V_{CSl} \times 0.5] + \sum(S_n \times V_{Sn})$$

Where:

E = VOM emissions (tons);

I_i = Heatset ink usage (tons);

V_{Ii} = VOM content of heatset ink (weight fraction);

FS_j = Heatset fountain solution containing no alcohol usage (tons);

V_{FSj} = VOM content of heatset fountain solution containing no alcohol (weight fraction);

CS_k = Heatset automatic cleaning solution with vapor pressure less than 10 mm of Hg usage (tons);

V_{CSk} = VOM content of heatset automatic cleaning solution with vapor pressure less than 10 mm of Hg (weight fraction);

CS_l = Manual cleaning solution with vapor pressure less than 10 mm of Hg usage (tons);

V_{CSl} = VOM content of manual cleaning solution with vapor pressure less than 10 mm of Hg (weight fraction);

CE = Afterburners control efficiency (fraction) demonstrated during the most recent stack test.

Im = Non-heatset ink usage (tons);

VIm = VOM content of non-heatset ink (weight fraction);

Sn = Other VOM-containing materials used; and

VSn = VOM content of other VOM-containing materials (weight fraction).

b. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.79 tons/month and 7.90 tons/year of any single HAP and 1.72 tons/month and 17.20 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 CAAPP permit from the Illinois EPA and the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.

c. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

9a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 10 and 11 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

10. 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.

11a. 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, or as otherwise specified in 35 Ill. Adm. Code 218 Subpart H. 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.

b. Pursuant to 35 Ill. Adm. Code 218.409(b), the methods and procedures of 35 Ill. Adm. Code 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1), as follows:

i. To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;

ii. To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A;

iii. To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:

A. The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;

B. The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

C. Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using

either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

iv. Notwithstanding the criteria or requirements in Method 25 that specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F);

v. During testing, the printing lines shall be operated at representative operating conditions and flow rates; and

vi. During testing, an air flow direction indicating device, such as a smoke stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with 35 Ill. Adm. Code 218.407(a)(1)(B).

c. Pursuant to 35 Ill. Adm. Code 218.409(c), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A), and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of 35 Ill. Adm. Code 218.411(a)(1)(B), (b)(1)(B), or (b)(2)(B), as applicable, shall be conducted upon request of the Illinois EPA or as otherwise specified in 35 Ill. Adm. Code 218 Subpart H, as follows:

i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used; provided, however, Method 24 shall be used to demonstrate compliance; or

ii. The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a); provided, however, Method 24 shall be used to determine compliance.

d. Pursuant to 35 Ill. Adm. Code 218.409(e), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. 218.110.

12a. 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 has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.

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 ± 1 percent of the temperature measured in degrees Celsius or ± 0.5°C, whichever is greater.

c. Pursuant to 35 Ill. Adm. Code 218.410(a), Fountain Solution Temperature:

   i. The owner or operator of any lithographic printing lines 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.

d. Pursuant to 35 Ill. Adm. Code 218.410(b), the owner or operator of any lithographic printing lines 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(e)(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(e)(2)(D). The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications.

e. Pursuant to 35 Ill. Adm. Code 218.410(c), if an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to 35 Ill. Adm. Code 218.407(a)(1)(C) shall:

i. Install, calibrate, maintain, and operate temperature monitoring devices with an accuracy of 3°C or 5°F on the afterburner in accordance with 35 Ill. Adm. Code 218.105(d)(2) and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the afterburner is operating; and

ii. Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

f. 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(f)(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 lines as set forth in 35 Ill. Adm. Code 218.411(f)(2)(C).

13. 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.

14. 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.

15a. Pursuant to 35 Ill. Adm. Code 218.411(d)(3) an owner or operator of a heatset web offset lithographic printing line subject to the control requirements of 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1) shall, except as provided in 35 Ill. Adm. Code 218.411(d)(3)(D)(ii), collect and record daily the following information for each heatset web offset lithographic printing line subject to the requirements of 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1):

i. Afterburner or other approved control device monitoring data in accordance with 35 Ill. Adm. Code 218.410(c) or (d), as applicable;

ii. A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;

iii. A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages; and

iv. A log detailing checks on the air flow direction or air pressure of the dryer and press room to ensure compliance with the requirements of 35 Ill. Adm. Code 218.407(a)(1)(B) on and after August 1, 2010, at least once per calendar month while the line is operating.

b. Pursuant to 35 Ill. Adm. Code 218.411(e)(2), an owner or operator of a lithographic printing line subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3) shall collect and record the following information for each fountain solution:

i. The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing lines or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;

ii. If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to 35 Ill. Adm. Code 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3):

A. The date and time of preparation, and each subsequent modification, of the batch;

B. The results of each measurement taken in accordance with 35 Ill. Adm. Code 218.410(b);

C. Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and

D. Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;

iii. If the VOM content of the fountain solution is determined pursuant to 35 Ill. Adm. Code 218.410(b)(1)(A), for each batch of as-applied fountain solution:

A. Date and time of preparation and each subsequent modification of the batch;

B. Volume or weight, as applicable, and VOM content of each component used in, or subsequently added to, the fountain solution batch;

C. Calculated VOM content of the as-applied fountain solution; and

D. Any other information necessary to demonstrate compliance with the applicable VOM content limits in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) and (a)(3).

iv. If the VOM content of the fountain solution is determined pursuant to 35 Ill. Adm. Code 218.410(b)(2), for each setting:

A. VOM content limit corresponding to each setting;

B. Date and time of initial setting and each subsequent setting;

C. Documentation of the periodic calibration of the automatic feed equipment in accordance with the manufacturer's specifications; and

D. Any other information necessary to demonstrate compliance with the applicable VOM content limits in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2) and (a)(3);

v. If the owner or operator relies on the temperature of the fountain solution to comply with the requirements in 35 Ill. Adm. Code 218.407(a)(1)(A)(ii) or (a)(3)(B):

A. The temperature of the fountain solution at each printing line, as monitored in accordance with 35 Ill. Adm. Code 218.410(a); and

B. A maintenance log for the temperature monitoring devices and automatic, continuous temperature recorders detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

c. Pursuant to 35 Ill. Adm. Code 218.411(f)(2), for lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the limitations 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, supporting calculations; and

F. A calibration log for the automatic equipment, detailing periodic checks;

ii. For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(A) and that is not prepared at the source with automatic equipment:

A. The name and identification of each cleaning solution;

B. Date and time of preparation, and each subsequent modification, of the batch;

C. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(c);

D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a);

iii. For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(B):

A. The name and identification of each cleaning solution;

B. Date and time of preparation, and each subsequent modification, of the batch;

C. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with 35 Ill. Adm. Code 218.409(e). For cleaning solutions that are used as purchased, the manufacturer’s specifications for VOM composite partial vapor pressure may be used if such manufacturer’s specifications are based on results of tests conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a) and 218.110;

D. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

E. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(e). For cleaning solutions that are used as purchased, the manufacturer’s specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a) and 218.110;

iv. The date, time and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;

d. Pursuant to 35 Ill. Adm. Code 218.411(g)(2)(A), the owner or operator of lithographic printing lines subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) shall, unless the source has certified in accordance with 35 Ill. Adm. Code 218.411(g)(1)(B) that it will not make use of any of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3), collect and record the following information for all lithographic printing lines at the source:

i. Calculations that demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, determined in accordance with the calculations in 35 Ill. Adm. Code 218.411(b)(2)(B);

ii. The amount of cleaning materials used on lithographic printing lines at the source that does not comply with the cleaning material limitations in 35 Ill. Adm. Code 218.407(a)(4);

e. Pursuant to 35 Ill. Adm. Code 218.411(h), the owner or operator shall maintain all records required by 35 Ill. Adm. Code 218.411 at the source for a minimum period of three years and shall make all records available to the Illinois EPA upon request.

16a. 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 catalytic oxidizers:

A. Records for periodic inspection of catalytic oxidizers 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. Monthly and annual usage of the inks, coatings, fountain solution and clean-up solvents (tons/month and tons/year);

iii. The VOM content and the HAP content of the inks, coatings, adhesives and clean-up solvents used (weight %);

iv. Density of the inks, coatings, fountain solution and clean-up solvents and clean-up solvents (lbs/gallon); and

vi. Monthly and annual VOM and HAP emissions from the source with supporting calculations (tons/month and tons/year).

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

17. 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.

18a. Pursuant to 35 Ill. Adm. Code 218.411(d), an owner or operator of a heatset web offset lithographic printing line subject to the control requirements of 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1) shall comply with the following:

i. If testing of the afterburner or other approved control device is conducted pursuant to 35 Ill. Adm. Code 218.409(b), the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Illinois EPA and shall submit a certification to the Illinois EPA that includes the following:

A. A declaration that all tests and calculations necessary to demonstrate whether the lithographic printing line(s) is in compliance with 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1), as applicable, have been properly performed;

B. A statement whether the lithographic printing line(s) is or is not in compliance with 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1), as applicable; and

C. The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with 35 Ill. Adm. Code 218.410(c) or (d), as applicable.

ii. Notify the Illinois EPA in writing of any violation of 35 Ill. Adm. Code 218.407(a)(1)(C) or (b)(1) within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation.

iii. If changing its method of compliance between 35 Ill. Adm. Code 218.411(a)(1)(C) and (b), certify compliance for the new method of compliance in accordance with 35 Ill. Adm. Code 218.411(d)(1) at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing lines will be in compliance with the requirements of 35 Ill. Adm. Code 218.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E), or 35 Ill. Adm. Code 218.407(b), as applicable.

b. Pursuant to 35 Ill. Adm. Code 218.411(e)(3), an owner or operator of a lithographic printing line subject to of 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3), shall 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

c. Pursuant to 35 Ill. Adm. Code 218.411(f)(3), 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 notify the Illinois EPA in writing of any violation of 35 Ill. Adm. Code 218.407 within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation.

d. Pursuant to 35 Ill. Adm. Code 218.411(g), the owner or operator of lithographic printing lines subject to one or more of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) shall:

i. If changing from utilization of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) to opting out of such exclusions pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B), or if there is a change at the source such that the exclusions no longer apply, certify compliance in accordance with 35 Ill. Adm. Code 218.411(g)(1)(B), within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of 35 Ill. Adm. Code 218.407;

ii. If changing from opting out of the exclusions set forth in 35 Ill. Adm. Code 218.405(c)(3) pursuant to 35 Ill. Adm. Code 218.411(g)(1)(B) to utilization of such exclusions, certify compliance in accordance with 35 Ill. Adm. Code 218.411(g)(1)(A) within 30 days after making such change.

19a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required ‘ Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

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

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

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

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

It should be noted that this permit has been revised so as to include operation of the equipment described in Construction Permit 11070028.

If you have any questions on this permit, please call Valeriy Brodsky at 217/785-1705.

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

Date Signed: _____

ECB:VJB:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from printing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is used and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)		
Emission Unit	VOM	Single HAP	Combined HAPs
Lithographic Presses	17.20	7.90	17.20

ECB:VJB:psj