

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Crown Cork and Seal USA, Inc.  
Attn: Claudia Ruiz  
3737 East Exchange Avenue  
Aurora, Illinois 60504

<u>Application No.:</u> 04090062	<u>I.D. No.:</u> 043407AAO
<u>Applicant's Designation:</u>	<u>Date Received:</u> September 20, 2004
<u>Subject:</u> Can Sheet Coaters/Litho Presses	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 3737 East Exchange Avenue, Aurora, 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:

- Two (2) Sheet Coater Lines Each Controlled by an Afterburner;
- Two (2) Sheet-Fed Offset Lithographic Printing Presses Each with Can Sheet Coaters; and
- One (1) Mobile Solvent Recovery Treatment Unit comprised of a Pot Still, a Thin Film Evaporator, and a 168 kW Diesel Powered Generator;

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

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/yr for Volatile Organic Material (VOM) and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for any combination of such HAPs). As a result the source is excluded from the 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 the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements for 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 permits issued 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 212.306, 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.
- d. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 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.
- e. 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.

- f. 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).
- 3a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. 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 excess 2000 ppm.
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)).
- 4a. Pursuant to 35 Ill. Adm. Code 218.204(b), 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 Can Coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. (Note: The equation presented in 35 Ill. Adm. Code 218.206 shall be used to calculate emission limitations for determining compliance by add on controls, credits for transfer efficiency, emissions trades and cross line averaging.) The emission limitations are as follows:

	kg/l	lb/gal
i. Sheet basecoat and overvarnish		
A. Sheet basecoat	0.26	(2.2)
B. Overvarnish	0.34	(2.8)
ii. Exterior basecoat and overvarnish	0.25	(2.1)
iii. Interior body spray coat		
A) Two piece	0.44	(3.7)
B) Three piece	0.51	(4.2)
iv. Exterior end coat	0.51	(4.2)
v. Side seam spray coat	0.66	(5.5)
vi. End sealing compound coat	0.44	(3.7)

- b. Pursuant to 35 Ill. Adm. Code 218.207(a), any owner or operator of a coating line subject to 35 Ill. Adm. Code 218.204 may comply with 35 Ill. Adm. Code 218.207, rather than with 35 Ill. Adm. Code 218.204, if a capture system and control device are operated at all times the VOM coating line is in operation and the owner or operator demonstrates compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), or (k) (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in 35 Ill. Adm. Code 218.105 and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(e); and the control device is equipped with the applicable monitoring equipment specified in 35 Ill. Adm. Code 218.105(d) and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), or (k) may be used as an alternative to compliance with 35 Ill. Adm. Code 218.204 only if the alternative is approved by the Illinois EPA and approved by the USEPA as a SIP revision .
- c. Pursuant to 35 Ill. Adm. Code 218.207(h), no owner or operator of a can coating line which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in 35 Ill. Adm. Code 218.207(h) (1) or (h) (2) are met.
- i. An alternative daily emission limitation shall be determined for the can coating operation, i.e. for all of the can coating lines at the source, according to 35 Ill. Adm. Code 218.205(c) (2). Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^n V_i C_i (1-F_i)$$

where:

$E_d$  = Actual VOM emissions for the day in units of kg/day (lbs/day);

$i$  = Subscript denoting the specific coating applied;

$n$  = Total number of surface coatings as applied in the can coating operation;

$V_i$  = Volume of each coating as applied for the day in units of l/day (gallons/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

$C_i$  = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

$F_i$  = Fraction, by weight, of VOM emissions from the surface coating, reduced or prevented from being emitted to the ambient air. This is the overall efficiency of the capture system and control device.

- ii. The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.
- d. Pursuant to 35 Ill. Adm. Code 218.407(a), on and after March 15, 1996, no owner or operator of lithographic printing line(s) subject to the requirements of 35 Ill. Adm. Code 218 Subpart H shall:
  - i. Cause or allow the operation of any sheet-fed offset lithographic printing line unless:
    - A. The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or
    - B. The VOM content of the as-applied fountain solution is 8.5 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6° C (60° F), measured at the reservoir or the fountain tray;
  - ii. Cause or allow the use of a cleaning solution on any lithographic printing line unless:
    - A. The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or
    - B. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F);

- iii. Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers.
- e. 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 source, 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.
- 5. This permit is issued based on the can coating lines at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESAHP) for Surface Coating of Metal Cans, 40 CFR 63 Subpart KKKK. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs, which was established in Construction permit 98070069 prior to the Compliance Date for existing sources listed in 40 CFR 63.3483(b).
- 6a. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- b. This permit is issued based on the Mobile Solvent Recovery Treatment 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 (Other Emission Units) 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. 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 afterburners shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- c. Notwithstanding 35 Ill. Adm. Code 218.107, seasonal shutdown of the afterburners from November 1 through March 31 of the following year is not allowed.
- d. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the afterburner such that the afterburner is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

- e. 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.
- f. The diesel-powered generator associated with the Mobile Solvent Recovery Treatment Unit shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the diesel-powered generator 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.
- g. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent, or
  - ii. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.00015) x (Gross heating value of oil, Btu/lb).
- h. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
- i. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 8a. Emissions and operation of the two Sheet Coaters (C-3 and C-4) shall not exceed the following limits:

VOM Usage		VOM Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
160	1,600	1.28	12.80

These limits are based on the maximum material usage, a 60% recovery of solvent used collected as waste and shipped off-site, and minimum 98% overall control efficiency for the afterburner. The VOM emissions shall be determined from the following equation:

$$E = \Sigma [(P_i \times C_i) + (S_j \times C_j) - (W_k \times C_k)] \times (1 - C_{ef}) / 2,000$$

Where:

E = VOM emissions (ton);

P<sub>i</sub> = Coating usage (gal);

C<sub>i</sub> = VOM content of the coating (lb/gal);

S<sub>j</sub> = Clean-up solvent usage (gal);

C<sub>j</sub> = VOM content of the solvent (lb/gal);

W<sub>k</sub> = Amount of waste solvent shipped off (gal);

$C_k$  = VOM content of the waste (lb/gal); and

$C_{ef}$  = Actual efficiency of the control system that was demonstrated during the most recent stack test (fraction)

- b. Operations and emissions of lithographic printing presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Inks and Fountain Solutions	0.30	3.00	0.30	3.00
Cleanup Solvent	2.00	20.00	0.80	8.00

These limits are based on the maximum material usage and minimum 60% recovery of solvent used collected as waste and shipped off-site.

- c. Emissions and operation of the fuel combustion equipment shall not exceed the following limits:

- i. Natural gas usage: 9.6 mmscf/mo and 96 mmscf/yr
- ii. Emissions of nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), volatile organic material (VOM), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM):

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lb/mmscf)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
CO	84	0.41	4.04
NO <sub>x</sub>	100	0.42	4.81
PM	7.6	0.04	0.37
SO <sub>2</sub>	0.6	0.01	0.03
VOM	5.5	0.03	0.27

These limits are based on the maximum firing rage, 8760 hours per year, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- d. Emissions and operation of the 168 kW diesel fired generator shall not exceed the following limits:

- i. Fuel Oil Usage: 1,068 gallons/month, 10,675 gallons/year
- ii. Emissions for the generator:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lbs/1,000 Gal)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	604.2	0.33	3.23
Carbon Monoxide (CO)	130.2	0.07	0.70
Particulate Matter (PM)	42.5	0.03	0.23
Sulfur Dioxide (SO <sub>2</sub> )	39.8	0.03	0.22
Volatile Organic Material (VOM)	49.32	0.03	0.27

These limits are based on the maximum engine operations, diesel at 137,000 btu/gallon, and standard emission factors (Table 3.3-1, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- e. This permit is issued based on negligible emissions of VOM and HAPs from the distillation column with condenser associated with the Mobile Solvent Recovery Unit. For this purpose, emissions from this unit shall not exceed nominal emission rates of 0.10 lb/hour and 0.44 tons/year.
- f. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA and the NESHAP for Surface Coating of Metal Cans, 40 CFR 63 Subpart KKKK.
- g. 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 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
  - b. Pursuant to 35 Ill. Adm. Code 218.409(a), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.407 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA. Such testing shall be conducted at the expense of the owner or operator and the owner or 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.
  - c. Pursuant to 35 Ill. Adm. Code 218.409(c), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A), and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of 35 Ill. Adm. Code 218.411(a)(1)(B)), shall be conducted upon request of the Illinois EPA, as follows:
    - i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used; provided, however, Method 24, shall be used to demonstrate compliance; or
    - ii. The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a); provided, however, Method 24 shall be used to determine compliance.
  - d. Pursuant to 35 Ill. Adm. Code 218.409(e), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 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 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  $\pm 0.50$  C, whichever is greater.

c. Fountain Solution Temperature.

- i. Pursuant to 35 Ill. Adm. Code 218.410(a)(1), 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. Pursuant to 35 Ill. Adm. Code 218.410(a)(2), The temperature monitor must be capable of reading with an accuracy of  $1^{\circ}\text{C}$  or  $2^{\circ}\text{C}$ , 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. Fountain Solution VOM Content. 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):

- 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.
- e. Cleaning Solution.
- i. Pursuant to 35 Ill. Adm. Code 218.410(e)(1), 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. Pursuant to 35 Ill. Adm. Code 218.410(e)(2), 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) .

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 218.105(c) (4) (A), all owners or operators affected by 35 Ill. Adm. Code 218.105(c) must maintain a copy of the capture efficiency protocol submitted to the Illinois EPA and the USEPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to the Illinois EPA within 60 days of the test date. A copy of the results must be kept on file with the source for a period of 3 years.
- b. 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 other than 35 Ill. Adm. Code 218.204(a) (2) or (a) (3) and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating as applied on each coating line;

- ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
- c. Pursuant to 35 Ill. Adm. Code 218.211(e), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207 of and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g) or (h) shall collect and record of all the following information each day for each coating line and maintain the information at the source 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 coating line.
  - iii. A maintenance log for the capture system, control device 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 218.411(c)(2), an owner or operator of a lithographic printing line subject to 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3), shall collect and record the following information for each fountain solution:
- i. The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line(s) or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;
  - ii. If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to 35 Ill. Adm. Code 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in 35 Ill. Adm. Code 218.407(a)(1)(A), (a)(2), or (a)(3):
    - A. The date and time of preparation, and each subsequent modification, of the batch;
    - B. The results of each measurement taken in accordance with 35 Ill. Adm. Code 218.410(b);
    - C. Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and
    - D. Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;

- iii. If the VOM content of the fountain solution is determined pursuant to 35 Ill. Adm. Code 218.410(b) (1) (A), for each batch of as-applied fountain solution:
  - A. Date and time of preparation and each subsequent modification of the batch;
  - B. Volume and VOM content of each component used in, or subsequently added to, the fountain solution batch;
  - C. Calculated VOM content of the as-applied fountain solution; and
  - D. Any other information necessary to demonstrate compliance with the applicable VOM content limits in Section 218.407(a) (1) (A), (a) (2) and (a) (3) of this Subpart, as specified in the source's operating permit;
- 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), as specified in the source's operating permit.
- 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;
- e. 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) and which is prepared at the source with automatic equipment:

- A. The name and identification of each cleaning solution;
  - B. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(c);
  - C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
  - D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
  - E. The VOM content of the as-used cleaning solution, with supporting calculations; and
  - F. A calibration log for the automatic equipment, detailing periodic checks;
- ii. For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(A), and which is not prepared at the source with automatic equipment:
- A. The name and identification of each cleaning solution;
  - B. Date and time of preparation, and each subsequent modification, of the batch;
  - C. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(c);
  - D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
  - E. The VOM content of the as-used cleaning solution, with supporting calculations;
- iii. For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with 35 Ill. Adm. Code 218.407(a)(4)(B):
- A. The name and identification of each cleaning solution;
  - B. Date and time of preparation, and each subsequent modification, of the batch;
  - C. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with 35 Ill. Adm. Code 218.409(e);

- D. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
  - E. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with 35 Ill. Adm. Code 218.409(e);
- iv. The date, time and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;
- f. Pursuant to 35 Ill. Adm. Code 218.411(e), 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 afterburners:
    - A. Records for periodic inspection of the afterburners 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. Coatings and inks usage (gallons/month and gallons/year);
  - iii. Cleanup solvent and fountain solution usage (gallons/month and gallons/year);
  - iv. VOM and HAP content of coatings, inks, cleanup solvent and fountain solution, (lbs/gallon);
  - v. Certified amount of waste solvent collected and shipped offsite (gallons/month and gallons/year);
  - vi. Certified VOM and HAP content of solvents shipped offsite (lbs/gallon or wt.%);
  - vii. Natural gas usage (mmscf/month and mmscf/year);
  - viii. Fuel oil usage (gallons/month and gallons/year);
  - ix. Sulfur content of the fuel oil used in the diesel-powered generator associated with the Mobile Solvent Recovery Unit (% by weight); and
  - x. Monthly and annual CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAP emissions 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 218.105(c)(4)(B), if any changes are made to capture or control equipment, then the source is required to notify the Illinois EPA and the USEPA of these changes and a new test may be required by the Illinois EPA or the USEPA.
- b. Pursuant to 35 Ill. Adm. Code 218.105(c)(4)(C), the source must notify the Illinois EPA 30 days prior to performing any capture efficiency or control test. At that time, the source must notify the Illinois EPA which capture efficiency protocol and control device test methods will be used. Notification of the actual date and expected time of testing must be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notification with shorter advance notice provided that such arrangements do not interfere with the Illinois EPA's ability to review the protocol or observe testing.
- c. 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 other than 35 Ill. Adm. Code 218.204(a)(2) or (a)(3) and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:
- i. Any record showing a 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 Section 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 subsection (d) or (e) of this Section, respectively.
- d. Pursuant to 35 Ill. Adm. Code 218.211(e)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207

and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g) or (h) shall notify the Illinois EPA in the following instances:

- i. Any record showing violation of 35 Ill. Adm. Code 218.207 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.207 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c)(1) or (d)(1), respectively. Upon changing the method of compliance with this subpart from 35 Ill. Adm. Code 218.207 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c) or (d), respectively.
- e. 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.
- f. 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. On and after March 15, 1996, 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).

- g. 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.
- 19a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:

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

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

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

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

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

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

ECB:GMK:jws

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the can coating plant, operating in compliance with the requirements of this federally enforceable permit. In preparing this summary the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons per year of VOM, 10 tons per years of a single HAP and 25 tons per year for combination of such HAPs), at which this source would be considered a major source for proposes 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, coatings used 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	Total
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	<u>HAP</u>	<u>HAPs</u>
2 Can Coaters					12.80		
Fuel Combustion	4.04	4.81	0.37	0.03	0.27		
2 Lithographic Printing Presses							
Inks & Fountain Solutions					3.00		
Cleanup Solvents					8.00		
Generator	0.70	3.23	0.23	0.22	0.27		
Distillation Column with Condenser	--	--	--	--	0.44	---	---
Totals:	4.74	8.04	0.60	0.25	24.78	9.0	22.5

GMK:jws