



- ii. The affected printing lines are subject to the following:
  - A. The volatile organic material (VOM) content of the as-applied fountain solution shall be 5 percent or less, by weight. [35 IAC 218.407(a)(3)(A)]
  - B. The cleaning solution shall meet one of the following requirements.
    - 1. The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or [35 IAC 218.407(a)(4)(A)(i)]
    - 2. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F). [35 IAC 218.407(a)(4)(B)]
  - C. The VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line shall be kept, stored and disposed of only in closed containers, except when specifically in use. [35 IAC 218.407(a)(5)]
- b. An "affected coating line" for the purpose of these unit-specific conditions, is a flexographic coating operation described in Conditions 1.1.1 and 1.1.2.
- c. i. An "affected unit" is the combination of affected printing line and affected coating line on an individual press.
  - ii. The Permittee shall not cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from each affected unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690. [35 IAC 218.301]

1.1.4 Non-Applicability Provisions

- a. This permit is issued based on the affected coating lines not subject to the paper coating limitation in 35 IAC 218.204(c) because the lines are required to comply with the applicable emissions limits in 35 IAC Part 218 Subpart H. [35 IAC 218.204(c)(3)]

- b. i. This permit is issued based on this project not being a major modification for purposes of the state rules for Major Stationary Sources Construction and Modification (MSSCAM), 35 IAC Part 203. This is because this project will not result in a significant net increase in emissions of VOM. (See also Table 1 at the end of this permit.)
- ii. This permit is issued based upon the permanent shutdown of Sheet-fed Offset Lithographic Press #4, Rotogravure Press #9, and the P-9 Gravure Afterburner. Any future operation of this equipment is prohibited unless the Permittee obtains a construction permit addressing the resumption of operation of that equipment and an appropriately revised version of this construction permit.
- c. The affected units are not subject to 35 IAC 218.187: Other Industrial Solvent Cleaning Operations, except for the recordkeeping and reporting requirements in 35 IAC 218.187(e). [35 IAC 218.187(a)(2)(B)]
- d. This permit is issued based on the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK because the source is not a major source of HAPs.

Note: The source's CAAPP permit contains provisions limiting HAP emissions (See Condition 5.6.2 of the source's CAAPP permit, Permit Number 95090022) as well as other requirements to verify minor source status for HAP emissions, which will continue to apply to the source. Accordingly, the addition of the affected units will not change the minor source status of the source.

1.1.5 Production and Emission Limits

- a. i. VOM usage shall not exceed 4 tons/month and 20 tons/year for coatings and 2.6 tons/month and 13 tons/year for wash materials used on the affected units.
- ii. Emissions of VOM from the affected units shall not exceed 8.32 tons/month and 41.6 tons/year.
- iii. Compliance with the annual limits shall be determined from a running total of 12 months of data.
- b. This permit is issued based on the addition of the affected units in combination with the existing emission units at the source not affecting the source's status as a minor

source for emissions of hazardous air pollutants (HAPs). The source's Clean Air Act Permit Program (CAAPP) permit (Permit No. 95090022) contains provisions limiting source-wide HAP emissions to less than 10 tons of any individual HAP and less than 25 tons total (See Condition 5.6.2 of the source's CAAPP). The CAAPP permit also imposes recordkeeping requirements to verify minor source status for HAPs.

1.1.6 Testing Requirements

- a. For the affected printing lines:
  - i. Testing to demonstrate compliance with the requirements of 35 IAC 218.407 shall be conducted by the Permittee within 90 days after a request by the Illinois EPA. Such testing shall be conducted at the expense of the Permittee and the Permittee 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. [35 IAC 218.409(a)]
  - ii. Testing to demonstrate compliance with the VOM content limitations in 35 IAC 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 IAC 218.411(a)(1)(B), (b)(1)(B), or (b)(2)(B) as applicable), shall be conducted upon request of the Illinois EPA, as follows: [35 IAC 218.409(c)]
    - A. The applicable test methods and procedures specified in 35 IAC 218.105(a) shall be used; provided, however, Method 24, incorporated by reference at 35 IAC 218.112, shall be used to demonstrate compliance; or
    - B. 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 IAC 218.105(a); provided, however, Method 24 shall be used to determine compliance.
  - iii. 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 IAC 218.110. [35 IAC 218.409(e)]

- b. For the affected coating lines, the VOM content of each coating shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105.

1.1.7 Monitoring Requirements

The Permittee shall conduct the following monitoring for the affected printing line:

- a. Fountain Solution VOM Content.
  - i. For a fountain solution to which VOM is not added automatically, the Permittee shall maintain records of the VOM content of the fountain solution in accordance with 35 IAC 218.411(e)(2)(C). [35 IAC 218.410(b)(1)(A)]
  - 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. The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications. [35 IAC 218.410(b)(2)]
- b. Cleaning Solution.
  - i. If the Permittee is relying on the VOM content of the cleaning solution to comply with 35 IAC 218.407(a)(4)(A): [35 IAC 218.410(e)(1)]
    - A. For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
      - 1. 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
      - 2. 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 IAC 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 IAC 218.411(f)(2).
- ii. If the Permittee is relying on the vapor pressure of the cleaning solution to comply with 35 IAC 218.407(a)(4)(B), keep records for such cleaning solutions used on any such line(s) as set forth in 35 IAC 218.411(f)(2)(C). [35 IAC 218.410(e)(2)]

1.1.8 Recordkeeping Requirements

The Permittee shall maintain records of the following items:

- a. For the affected printing lines:
  - i. Collect and record the following information for each fountain solution: [35 IAC 218.411(e)(2)]
    - A. 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.
    - B. If the VOM content of the fountain solution is determined pursuant to 35 IAC 218.410(b)(1)(A), for each batch of as-applied fountain solution:
      - 1. Date and time of preparation and each subsequent modification of the batch.
      - 2. Volume or weight, as applicable, and VOM content of each component used in, or subsequently added to, the fountain solution batch.
      - 3. Calculated VOM content of the as-applied fountain solution.
    - C. If the VOM content of the fountain solution is determined pursuant to 35 IAC 218.410(b)(2), for each setting:
      - 1. VOM content limit corresponding to each setting.

2. Date and time of initial setting and each subsequent setting.
  3. Documentation of the periodic calibration of the automatic feed equipment in accordance with the manufacturer's specifications.
- ii. Collect and record the following information for each cleaning solution: [35 IAC 218.411(f)(2)]
- A. For each cleaning solution for which the Permittee relies on the VOM content to demonstrate compliance with 35 IAC 218.407(a)(4)(A) and which is prepared at the source with automatic equipment:
1. The name and identification of each cleaning solution.
  2. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 IAC 218.409(c).
  3. 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).
  4. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution.
  5. The VOM content of the as-used cleaning solution, with supporting calculations.
  6. A calibration log for the automatic equipment, detailing periodic checks.
- B. For each batch of cleaning solution for which the Permittee relies on the VOM content to demonstrate compliance with 35 IAC 218.407(a)(4)(A), and which is not prepared at the source with automatic equipment:
1. The name and identification of each cleaning solution.

2. Date and time of preparation, and each subsequent modification, of the batch.
  3. The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with 35 IAC 218.409(c).
  4. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution.
  5. 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 IAC 218.105(a).
- C. For each batch of cleaning solution for which the Permittee relies on the vapor pressure of the cleaning solution to demonstrate compliance with 35 IAC 218.407(a)(4)(B):
1. The name and identification of each cleaning solution.
  2. Date and time of preparation, and each subsequent modification, of the batch.
  3. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with 35 IAC 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 IAC 218.105(a) and 218.110.
  4. The total amount of each cleaning solvent used to prepare the as-used cleaning solution.
  5. The VOM composite partial vapor pressure of each as-used cleaning solution, as

determined in accordance with 35 IAC 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 IAC 218.105(a) and 218.110.

D. 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.

b. For the affected units:

- i. VOM and HAP usage for each raw material used (tons/month and tons/year) with supporting documentation.
- ii. Amount of cleanup solution reclaimed for reuse or sent offsite for disposal and VOM content of the waste.
- iii. VOM and HAP emissions (tons/month and tons/year), with supporting calculations.

1.1.9 Reporting Requirements

a. For the affected printing line, the Permittee shall:

- i. Upon initial startup of an affected printing line, the Permittee shall provide the certifications identified in 35 IAC 218.411(e)(1) and (f)(1) to the Illinois EPA, Compliance Section.
- ii. Notify the Illinois EPA in writing of any violation of 35 IAC 218.407 within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation. [35 IAC 218.411(e)(3) and 35 IAC 218.411(f)(3)]

b. Upon initial startup of the affected units, the Permittee shall submit a certification to the Illinois EPA that includes a description of each cleaning operation exempt pursuant to 35 IAC 218.187(a)(2), if any, and a listing of the emission units on which the exempt cleaning operation is performed. (35 IAC 218.187(e)(2)(A)]

c. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations of an affected unit with the permit requirements as follows unless otherwise specified by the CAAPP permit for the source. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Operation or emissions from the affected unit in excess of the limits specified in Condition 1.1.5 within 30 days of such occurrence.
- ii. Notifications for other deviations in a quarterly report.

1.1.10. Authorization to Operate

The affected units may be operated under this permit until renewal of the source's CAAPP permit provided the source has submitted a complete and timely CAAPP renewal application. This condition supersedes Standard Condition 6.

It should be noted that the new sheeter is exempt from state permit requirements pursuant to 35 IAC 201.146(aa). It should also be noted that the two new cutters (a modification to the pneumatic scrap system) are exempt from state permit requirements pursuant to 35 IAC 201.146(kkk).

If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

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

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

ECB:JMS:psj

cc: Region 1

Table 1: Netting Analysis (Tons/Year)

|  | Date         | Permit   | VOM  |
|--|--------------|----------|------|
| Project Emissions Increases            | Est. 10/2011 | 11080040 | 41.6 |
| Contemporaneous <sup>a</sup> Increases |              |          |      |
| Gluer                                  | 9/2008       | 08080035 | 0.1  |
| Gluer                                  | 9/2009       | 09050056 | 0.1  |
| Increases Subtotal                     |              |          | 0.2  |
| Contemporaneous <sup>a</sup> Decreases |              |          |      |
| Lithographic Press #4                  | Est. 10/2011 | 11080040 | 6.4  |
| Rotogravure Press #9 <sup>b</sup>      | 8/2009       | 11080040 | 5.0  |
| Decreases Subtotal                     |              |          | 11.4 |
| NET EMISSIONS CHANGE                   |              |          | 30.4 |
| Significance Threshold                 |              |          | 40   |
| Greater Than Significant               |              |          | No   |

## Notes:

- a. The contemporaneous time period begins August 16, 2006.
- b. Includes the VOM emissions attributable to natural gas combustion in the P-9 Gravure Afterburner.