

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Perfect Plastic Printing Corporation  
Attn: Carl Valenti, Corp. Security Manager  
345 Kautz Road  
St. Charles, Illinois 60174

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| <u>Application No.:</u> 02070017                          | <u>I.D. No.:</u> 089483ACM             |
| <u>Applicant's Designation:</u>                           | <u>Date Received:</u> October 19, 2007 |
| <u>Subject:</u> Screen and Lithographic Printing          |  |
| <u>Date Issued:</u>                                       | <u>Expiration Date:</u>                |
| <u>Location:</u> 345 Kautz Road, St. Charles, Kane County |  |

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of five non-heatset offset sheet-fed lithographic printing presses and three screen printing presses 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. This federally enforceable state operating permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM) and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year of 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 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.
  - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year so that the source is not subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT Other Emission Units.
- 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 218.204(c), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208 and 218.212 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 the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

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

(Note: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic or rotogravure printing is performed if the paper coating line complies with the emissions limitations in 35 Ill. Adm. Code 218.401. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT.)

- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kgs/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 exemption: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- 3a. 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. Pursuant to 35 Ill. Adm. Code 218.405(d)(2), on and after March 15, 1996, 35 Ill. Adm. Code Part 218.407 through 218.410 shall apply to all owners or operators of heatset web offset, non-heatset web offset, or sheet-fed offset lithographic printing line(s), unless the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day) as determined in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B), before the application of capture systems and control devices.

- c. Pursuant to 35 Ill. Adm. Code 218.408(b), no owner or operator of a lithographic printing line which is exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d), shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, 35 Ill. Adm. Code 218.405(d) and 218.411(a).
- c. This permit is issued based on the screen printing presses not being subject to control requirements 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). This permit establishes federally enforceable production and operating limitations, which restrict the potential to emit for VOM from all emission units not subject to 35 Ill. Adm. Code 218 Subparts F and H at this source to less than 25 tons per year so that the source is not subject to the requirements of these rules.
- 4. 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.
- 5a. VOM emissions from lithographic printing operations shall not exceed 0.88 tons/month and 7.0 tons/year. These limits are based on the maximum production rate. A credit for 50% VOM retention may be used if cleaning solvents has vapor pressure less than 10 mm Hg and used cleaning towels are stored in closed containers. No credits shall be taken for ink VOM retention in the plastic substrate. The VOM emissions shall be calculated using the following equations:

$$E = \sum (I_i \times V_{Ii}) + \sum (FS_j \times V_{FSj}) + \sum (CS_k \times V_{CSk})$$

Where:

E = VOM emissions (tons);

I<sub>i</sub> = Ink usage (tons);

V<sub>Ii</sub> = VOM content of ink (weight fraction);

FS<sub>j</sub> = Fountain solution usage (tons);

V<sub>FSj</sub> = VOM content of fountain solution (weight fraction);

CS<sub>k</sub> = Cleaning solution usage (tons); and

V<sub>CSk</sub> = VOM content of cleaning solution (weight fraction).

- b. VOM emissions from screen printing operations shall not exceed 2.0 tons/month and 16.5 tons/year. These limits are based on the maximum production rate. The VOM emissions shall be calculated using the following equations:

$$E = \sum U \times C_i - W \times C_w$$

Where:

E = VOM emissions (tons);

U = VOM-containing raw materials usage (tons);

C<sub>i</sub> = VOM content of raw materials (weight fraction);

W = Certified amount of waste disposed (tons); and

C<sub>w</sub> = Certified VOM content of the waste (weight fraction).

- c. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this 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 requirement to obtain a CAAPP permit from the Illinois EPA.
6. 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).
- 7a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or

ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Condition 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
8. 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.
9. 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.
- 10a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to 35 Ill. Adm. Code 218.204 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;
- b Pursuant to 35 Ill. Adm. Code 218.411(a)(2), an owner or operator of lithographic printing line(s) exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d) shall collect and record either the information specified in 35 Ill. Adm. Code 218.411(a)(2)(A) or (a)(2)(B) for all lithographic printing lines at the source:
- i. Standard recordkeeping, including the following:
    - A. The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line recorded each month;
    - B. A daily records which shows whether a lithographic printing line at the source was in operation on that day;
    - C. The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
    - D. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with applicable ink VOM emission adjustment) used at the source, calculated each month; and
    - D. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and
    - E. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B);
  - ii. Purchase and inventory recordkeeping, including the following:
    - A. The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
    - B. Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;

- C. Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;
  - D. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
  - E. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to 35 Ill. Adm. Code 218.411(a)(2)(B)(i), (a)(2)(B)(ii) and (a)(2)(B)(iii); and
  - F. The VOM emissions in lbs/day for the month, calculated in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B);
- 11a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Plant-wide usage of VOM and HAP-containing materials (tons/month, tons/year);
  - ii. VOM and HAP content of all VOM and HAP-containing materials (weight %);
  - iii. Certified amount of waste shipped off site (tons/month, tons/year);
  - iv. Certified VOM and HAP content of the waste (weight %); and
  - v. Monthly and annual VOM and HAP emissions, with supporting calculations (and applicable retention credits) (tons/month, 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) 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.
12. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/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.

13a. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:

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

b. Pursuant to 35 Ill. Adm. Code 218.411(a)(3), an owner or operator of lithographic printing line(s) exempt from the limitations of 35 Ill. Adm. Code 218.407 because of the criteria in 35 Ill. Adm. Code 218.405(d) shall notify the Illinois EPA in writing if the 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 ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

c. 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.

14. 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:

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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 David Hulskotter at  
217/782-2113.

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

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

ECB:DWH:psj

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the source 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 year for a single HAP, and 25 tons per year for totaled 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 handled, and control measures are more effective than required in this permit.

| <u>Emission Unit</u>             | E M I S S I O N S (Tons/Year) |                   |                   |
|----------------------------------|-------------------------------|-------------------|-------------------|
|                                  | <u>VOM</u>                    | <u>Single HAP</u> | <u>Total HAPs</u> |
| Lithographic Printing Operations | 7.0                           |                   |                   |
| Screen Printing Operations       | <u>16.5</u>                   |                   |                   |
| Totals                           | 23.5                          | <u>9.0</u>        | <u>22.5</u>       |

DWH:psj