

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Lawson Mardon Flexible  
Attn: Dennis Coil  
5303 St. Charles Road  
Bellwood, Illinois 60104-1089

Application No.: 00120009

I.D. No.: 031015AAM

Applicant's Designation:

Date Received: December 6, 2000

Subject: Press 4

Date Issued:

Location: 5303 St. Charles Road, Bellwood

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of flexographic press/laminator 4 controlled by existing catalytic oxidizer as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Unit Specific Conditions

1.1 Unit Flexographic Press/Laminator 4  
Control Catalytic Oxidizer

1.1.1 Description

This printing press/laminator, a W&H Stellaflex central impression flexographic press, with in-line coater will be designated as Press #4. This press/laminator will utilize water-based and solvent-based inks and coatings to print on a paper or plastic web substrate. VOM from the print stations will be controlled by an existing catalytic oxidizer.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Press 4	Flexographic Press/Laminator	Catalytic Oxidizer

1.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected press" for the purpose of these unit-specific conditions, is a press as described in conditions 1.1.1 and 1.1.2.
- b. No owner or operator of a subject flexographic, packaging rotogravure or publication rotogravure printing line equipped with a capture system and

control device shall operate the subject printing line unless the owner or operator meets the following requirements [35 IAC 218.401(c)]:

- i. The catalytic oxidizer is used which reduces the captured VOM emissions by at least 90 percent by weight;
- ii. The printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least:
  - A. 75 percent where a publication rotogravure printing line is employed.
  - B. 65 percent where a packaging rotogravure printing line is employed.
  - C. 60 percent where a flexographic printing line is employed.
- iii. The control device is equipped with the applicable monitoring equipment specified in 35 IAC 218.105(d)(2) and except as provided in 35 IAC 218.105(d)(3), the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use;
- iv. The capture system and control device are operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with this subsection by using the applicable capture system and control device test methods and procedures specified in 35 IAC 218.105(c) through 218.105(f) and by complying with the recordkeeping and reporting requirements specified in 35 IAC 218.404(e).

1.1.4 Non-Applicability of Regulations of Concern

- a. The affected press is not subject to 35 IAC Part 218, Subpart G, Use of Organic Material, because the affected press complying with 35 IAC Part 218, Subpart H, is not required to meet Subpart G [35 IAC 218.402(b)].

- b. The affected press is not subject to 35 IAC 218.204(c), Coating Operations, Paper Coating, because the paper coating limitation does not apply to a line on which printing is performed which complies with the emission limitations in 35 IAC 218.401 [35 IAC 218.204(c)].
- c. This permit is issued based on the affected press not being subject to the New Source Performance Standards (NSPS) for Publication Rotogravure Printing, 40 CFR Part 60, Subpart QQ, because the affected press does not meet the definition of a publication rotogravure printer.
- d. This permit is issued based on the affected press not being subject to National Emission Standard for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR Part 63, Subpart KK, because the affected press is not located at a major source for hazardous air pollutants.

1.1.5 Operational And Production Limits And Work Practices

None

1.1.6 Emission Limitations

- a. Emissions from the affected press shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
2.5	18.74

Compliance with these limits shall be determined using the compliance procedures specified in condition 1.1.12.

- b. Compliance with annual limits 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).
- c. The source has addressed the applicability and compliance of 35 IAC Part 203, Major Stationary Sources Construction and Modification (See Attachment 1). These limits continue to ensure that the construction and/or modification addressed in this

construction permit does not constitute a new major source or major modification pursuant to these rules.

1.1.7 Testing Requirements

The VOM content of each coating and ink and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105 to establish the records required under 35 IAC Part 218 [35 IAC 218.404(a)].

1.1.8 Monitoring Requirements

The catalytic oxidizer shall be equipped with continuous monitoring device which is installed, calibrated, operated and maintained according to vendor specifications at all times the oxidizer is in use. The monitoring device shall monitor the temperature rise across the catalytic bed or VOM concentration of exhaust [218.105(d)(2)].

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected press to demonstrate compliance with condition 1.1.6:

- a. The owner or operator shall collect and record all of the following information each day for the affected press and maintain the information at the facility for a period of three years [35 IAC 218.404(e)(2)]:
  - i. Control device monitoring data;
  - ii. A log of the operating time for the capture system, control device, monitoring equipment and the printing and coating operations;
  - iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages;
- b. Usage of each ink and coating (pounds/year);
- c. VOM content of each ink and coating (weight percent);
- d. VOM emissions from the affected press (tons/month and tons/year).

1.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected press with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any record showing violation of 35 IAC 218.401(c), shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation [35 IAC 218.404(e)(3)(A)].
- b. At least 30 calendar days before changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(c) to 35 IAC 218.401(a) or (b), the owner or operator shall comply with all requirements of 35 IAC 218.404(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(c) to 35 IAC 218.401(a) or (b), the owner or operator shall comply with all requirements of 35 IAC 218.404(c) or (d), respectively [35 IAC 218.404(e)(3)(B)].

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected press without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. Usage of inks, coatings, or cleaning solvents at this source, provided that the Permittee continues to comply with the Conditions 1.1.3(b) and 1.1.6 of this permit;
- b. Use of low VOM, UV, or water based coatings; and
- c. Use of low VOM cleaning solvents.

1.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 1.1.9 and the emission factors and formulas listed below:

To determine compliance with Condition 1.1.6, emissions from the affected press shall be calculated based on the following:

$$E = [(\text{ink usage, pounds}) * (\text{VOM content of ink, weight percent}) + (\text{coating usage, pounds}) * (\text{VOM content of coating, weight percent})] * (1 - \text{overall control efficiency}) / (2000 \text{ pounds/ton})$$

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

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:JMS:psj

cc: Region 1

Attachment 1

Nonattainment NSR Applicability

Contemporaneous Time Period of 1997 Through 2001

**Table I - Emissions Increases Associated With The Proposed Modification**

<u>Item of Equipment</u>	<u>Proposed Commencement of Operation Date</u>	<u>VOM Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Press #4	2001	18.74	00120009

**Table II - Source-Wide Creditable Contemporaneous Emission Increases**

<u>Item of Equipment</u>	<u>Commencement of Operation Date</u>	<u>VOM Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Press 6/Coater 2	1997	0.22	96090006
Parts Washing System	1998	5.04	98090072
Reverse Print Deck on Press 3	2000	<u>3.00</u>	99120049
	Total:	<u>8.26</u>	

**Table III - Source-Wide Creditable Contemporaneous Emission Decreases**

<u>Item of Equipment</u>	<u>Commencement of Operational Change Date</u>	<u>VOM Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
Parts Washer <sup>a</sup>	1998	2.10	89080066

**Table IV - Net Emissions Change**

	<u>(Tons/Year)</u>
Increases Associated With The Proposed Modification	18.74
Creditable Contemporaneous Emission Increases	8.26
Creditable Contemporaneous Emission Decreases	<u>-2.10</u>
	24.90

<sup>a</sup> This decrease is based on the actual emissions averaged from the two year period preceding the operational change. This includes calendar

years 1996 and 1997. This parts washer has been shutdown.

JMS:psj