

- a. This permit does not relax applicable requirements for the Press P-06 that are established in the Clean Air Act Permit Program (CAAPP) permit for the source.
- b.
 - i. Operational and Emission Limits
 - A. The maximum amount of VOM in the materials used in Press P-06 shall not exceed 100 tons/month and 1000 tons/year.
 - B.
 - 1. The enclosure installed on the Press P-06 shall meet the requirements of PTE, which are established in USEPA Method 204. As a result, the capture efficiency of VOM on Press P-06 is assumed to be 100 percent.
 - 2. Press P-06 shall be equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 98 percent.
 - ii. Emissions of VOM from Press P-06, including clean-up operations shall not exceed 2.0 tons per month and 20.0 tons per year.
- c. The operational requirements in Condition 1.2.1(b)(i) and the emission limits in Condition 1.2.1(b)(ii) become effective upon startup of new press P-08 or P-09, at which time these conditions will supersede the less stringent operational limits and emission limits for Press P-06 that previously applied.

1.2.2 Laminator L33/34

- a. This permit does not relax applicable requirements for the Laminator L33/34 that are established in the Clean Air Act Permit Program (CAAPP) permit for the source.
- b. This permit authorizes installation of duct work to route emissions from existing laminator L33/34 to the control system. This permit also authorizes installation of a permanent total enclosure (PTE) for the adhesive application stations on laminator L33/34.
 - i. The capture system and control system shall be operated at all times when laminator L33/34 is in operation.
 - ii. The PTE installed on the adhesive application stations on laminator L33/34 shall meet the requirements of PTE, which are established in USEPA Method 204, so that the capture efficiency of VOM on

the adhesive application stations on laminator L33/34 may be assumed to be 100 percent.

iii. The control system shall be operated so that VOM emissions from the adhesive application stations on laminator L33/34 are reduced by 98 percent, by weight.

c. Operational and Emission Limits.

i. The maximum amount of VOM in the materials, including clean-up operations, used on laminator L33/34 shall not exceed 40 tons/month and 401.5 tons/year.

ii. Emissions of VOM from laminator L33/34, including clean-up operations, shall not exceed 0.8 tons per month and 8.03 tons per year.

d. The capture requirements in Condition 1.2.2(b)(i)-(iii), the operational requirements in Condition 1.2.2(c)(i), and the emission limits in Condition 1.2.2(c)(ii) become effective upon startup of either of the new press P-08 or P-09, at which time these conditions will supersede the requirements for capture efficiency, operational limits that previously applied.

1.2.3 Other Existing Equipment

a. This permit authorizes other existing equipment currently controlled by afterburner I03 to be controlled by the control system (I03 and I04 operating in tandem).

1.2.4 Testing Requirements

a. Testing of the capture system for Press P-06 and Laminator L33/34 shall be conducted in conjunction with the tests required by Condition 2.1.7(a). This testing shall be conducted at the expense of the Permittee.

b. The methods and procedures USEPA Method 204 of 40 CFR Part 51, Appendix M shall be used for testing to demonstrate compliance with the requirements of Conditions 1.2.1(b)(i)(B)(1) and 1.2.2(b)(ii), unless another method is approved by the Illinois EPA.

c. At least 60 days prior to the actual date of testing required by Condition 1.2.4(a), a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing. This test plan may be submitted in conjunction with the test plan required by Condition 2.1.7(c) and shall describe the procedures for testing consistent with the minimum requirements of Condition 2.1.7(c).

- d. The Illinois EPA shall be notified prior to the capture efficiency tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- e. Copies of the Final Report(s) for the capture efficiency tests shall be submitted to the Illinois EPA within 30 days after the completion of the test program (i.e. the date when the last test is completed). This final report may be submitted in conjunction with the final report required by Condition 2.1.7(e) and shall include as a minimum the items identified in Condition 2.1.7(e).

1.3 Non-Applicability Provisions

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 VOM emissions. (See also Table 1 and 2.)

1.4 Annual Limits

Unless specified in a particular condition, compliance with annual limits set by this permit shall be determined from a running total of 12 months of data.

1.5 Overall Project Reporting Requirements

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the source, notifications and reports for deviations from applicable emission standards and control requirements and other requirements of this permit shall include at least the following information: the date and time of the event, a description of the event, information on the magnitude of the deviation, a description of the corrective measures taken, and a description of any preventive measures taken to prevent future occurrences.

1.6 Addresses

- a. One copy of all 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

- b. One copy of required reports and notifications concerning required emissions testing shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit, Third Floor
9511 Harrison Street
Des Plaines, Illinois 60016

- c. One copy of all required reports and notifications 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, Third Floor
9511 Harrison Street
Des Plaines, Illinois 60016

1.7 Authorization to Operate

The equipment addressed by this project may be operated under this construction permit until renewal of the source's CAAPP permit. This condition supersedes Standard Condition 6.

2.0 UNIT SPECIFIC CONDITIONS

2.1 Rotogravure Printing Lines

2.1.1 Description

Two new packaging rotogravure printing lines (P-08, P-09) will be installed in permanent total enclosure (PTE) with emissions ducted to the source's control system (I03 and I04).

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
P-08	Packaging rotogravure printing line	I03 and I04
P-09	Packaging rotogravure printing line	I03 and I04

2.1.3 Applicable Provisions and Emission Standards

- a. An "affected printing line" for the purpose of these unit-specific conditions, are the printing lines described in Conditions 2.1.1 and 2.2.1.
- b.
 - i. The affected printing lines are subject to 35 IAC Part 218 Subpart H: Printing and Publishing, which provides that:
 - A. The affected printing lines shall be equipped with an incineration system used to reduce the captured volatile organic material (VOM) emissions by at least 90 percent by weight. [35 IAC 218.401(c)(2)]
 - B. The affected printing lines shall be equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 65 percent. [35 IAC 218.401(c)(4)(B)]
 - ii. The Permittee shall demonstrate compliance with this condition by using the applicable capture system and control device test methods and procedures specified in 35 IAC 218.105(c) through 35 IAC 218.105(f) and by complying with the recordkeeping and reporting requirements specified in 35 IAC 218.404(e). [35 IAC 218.401(c)(6)]
- c. The affected printing lines are subject to 35 IAC 212.321(a), which provides that 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, 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 IAC 212.321(c).

- d. The affected printing lines are subject to 35 IAC 214.301, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

2.1.4 Non-Applicability Provisions

- a. The affected printing lines are not subject to 35 IAC 218.204(c), Coating Operations/Paper Coating, as 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 Subpart H: Printing and Publishing. [35 IAC 218.204(c)]
- b.
 - i. The affected printing lines are not subject to 40 CFR Part 63 Subpart KK: National Emission Standards for the Printing and Publishing Industry because the source is considered a minor source of hazardous air pollutant (HAP) emissions as required in Condition 5.5.2 of the source's Clean Air Act Permit Program (CAAPP) Permit, (Permit 95090157) and this status will not be altered by this project.
 - ii. The HAP emission of the source shall not exceed 8 tons/year for any individual HAP and 20 tons/year for all HAPs combined.

2.1.5 Control Requirements and Work Practices

- a.
 - i. The enclosure installed on the affected printing lines shall meet the requirements of PTE, which are established in USEPA Method 204. As a result, the capture efficiency of VOM on the affected printing lines is assumed to be 100 percent.
 - ii. The PTE and control system shall be operated so that VOM emissions from the affected printing lines are reduced by 98 percent, by weight.
- b.
 - i. The capture system and control system shall be operated at all times when the affected printing lines are in operation.
 - ii. A. Upon completion of start-up and achievement of normal operation of an affected printing line, during operation of the affected printing lines the control system combustion chambers shall be preheated to the temperature at which

compliance was demonstrated in the most recent emissions test or 1500°F in the absence of an emissions test, before the printing process is begun, and this temperature shall be maintained during operation of the affected printing lines.

B. Notwithstanding the above, the control system combustion chambers may be operated at a lower temperature for purposes of additional emissions testing.

iii. The Permittee shall follow good operating practices for the control system, including periodic inspection, routine maintenance and prompt repair of defects.

c. The affected printing lines and control system shall only be operated with natural gas as the fuel.

2.1.6 Production and Emission Limitations

- a. i. The maximum amount of VOM in the materials used in the affected printing line shall not exceed 210 tons/month and 2,100 tons/year.
- ii. Emissions of VOM from the affected printing lines, including clean-up operations, shall not exceed 4.3 tons per month and 42.7 tons per year, in total.

Note: This limit accommodates VOM emissions of 0.66 tons/year from combustion of natural gas in the affected printing lines and new RTO (I04).

- b. i. The maximum combined firing rate of the dryers associated with the affected printing lines and the burners in the new RTO (I04) shall not exceed 27.2 mmBtu/hr.
- ii. Emissions from the affected printing lines and new RTO (I04) associated with combustion of natural gas, shall not exceed the following limits:

Pollutant	Emissions	
	Lb/mmBtu	Tons/Year
NO _x	0.1	11.92
CO	0.084	10.01

2.1.7 Testing Requirements

- a. Testing of the capture system of the affected printing lines and the new RTO (I04) shall be conducted within 1 year of initial startup of the first press installation or 90 days after startup of the second press installation,

whichever comes first. Such testing shall be conducted at the expense of the Permittee.

- b. The methods and procedures of 35 IAC 218.105(d) and (f) and USEPA Method 204 of 40 CFR Part 51, Appendix M shall be used for testing to demonstrate compliance with the requirements of Condition 2.1.3(b) (see also 35 IAC 218.401(c)) and Condition 2.1.5(a)(iii), unless another method is approved by the Illinois EPA.
- c. At least 60 days prior to the actual date of testing required by Condition 2.1.7(a), a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions, the means by which the operating parameters for the emission unit and any control equipment will be determined, and whether other units such as Press P-06 will also be operated.
 - iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.
 - iv. The test method(s), which will be used, with the specific analysis method, if the method can be used with different analysis methods.
 - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- d. The Illinois EPA shall be notified prior to the destruction efficiency tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing. [35 IAC 218.409(a)]
- e. Copies of the Final Report(s) for the destruction efficiency tests shall be submitted to the Illinois EPA

within 30 days after the completion of the test program (i.e. the date when the last test is completed). The Final Report shall include as a minimum:

- i. A summary of results.
- ii. General information.
- iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
- iv. Detailed description of test conditions, including:
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption;
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing; and
- v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

2.1.8 Monitoring Requirements

The RTO's shall be equipped with the applicable monitoring equipment specified in 35 IAC 218.105(d)(2) and the monitoring equipment shall be installed, calibrated, operated and maintained according to vendor specifications at all times the control devices are in use. [35 IAC 218.401(c)(5)]

2.1.9 Recordkeeping Requirements

- a. The Permittee shall maintain records of the following items for each affected printing line:
 - i. The name and identification number of each VOM containing material used.
 - ii. The VOM content (weight %) of each VOM containing material used.
 - iii. Usage of each VOM containing material (tons/month and tons/year).
 - iv. VOM emissions (tons/month and tons/year) with supporting calculations and documentation.

- b. The Permittee shall maintain records of the following items for the capture and control devices on a daily basis: [35 IAC 218.404(e)(2)]
 - i. Control device monitoring data.
 - ii. A log of operating time for the capture system, control devices, monitoring equipment and the associated printing lines.
 - iii. A maintenance log for the capture system, control devices and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- c. The Permittee shall retain a file that contains the maximum firing rate of the press dryers on the affected printing lines and new RTO (mmBtu/hr) and the maximum emissions of NO_x, CO, PM, VOM, and SO₂ (lb/mmBtu and tons/year).

2.1.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Emissions in excess of the limits in Conditions 2.1.6(a)(ii) and (b)(ii) based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.
- b. The Permittee shall notify the Illinois EPA in the following instances: [35 IAC 218.404(e)(3)]
 - i. Any record showing violation of 35 IAC 218.401(c), 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 IAC 218.401 from 35 IAC 218.401(c) to 35 IAC 218.401(a) or (b), the Permittee 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 Permittee shall comply with all requirements of 35 IAC 218.404(c) or (d), respectively.

- c. Upon initial start-up of the affected printing lines, the Permittee shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the affected printing lines will be in compliance with 35 IAC 218.401(c) on and after the initial start-up date. [35 IAC 218.404(e)(1)]

2.2 Seaming Machines

2.2.1 Description

The four new seaming machines will form a seam in a roll of flat printed plastic film in order to convert the film into a tube. The seaming machines are a source of VOM emissions from the VOM solvent used in solvent welding the plastic film.

2.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
SMR 1-4	Seams are formed in plastic film	None

2.2.3 Applicable Provisions and Emission Standards

- a. The "affected seaming machines" for the purpose of these unit-specific conditions, are the seaming machines described in Conditions 2.2.1 and 2.2.2.
- b. The affected seaming machines are subject to 35 IAC Part 218 Subpart G: Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except if no odor nuisance exists this limitation shall apply only to photochemically reactive material.

2.2.4 Non-Applicability Provisions

This permit is issued based on the affected seaming machines not being subject to 35 IAC Part 218 Subpart TT: Other Emission Units. This is because of the emission limitation established for the affected seaming machines. Specifically, the limit established in Condition 2.2.6 is below the applicability thresholds of Subpart TT (See also 35 IAC 218.980(a)(1)(B) and 35 IAC 218.980(b)(1)).

Note: Emissions from the printing, coating, and solvent cleaning operations at the source are required to be included in the emission calculations for applicability of Subpart TT.

2.2.5 Control Requirements and Work Practices

At all times, the Permittee shall maintain and operate the affected seaming machines in a manner consistent with good air pollution control practice for minimizing emissions.

2.2.6 Production and Emission Limitations

- a. The maximum amount of VOM in the materials used in the affected seaming machines shall not exceed 1.5 tons/month and 15.0 tons/year, in total.

- b. Emissions of VOM from the affected seaming lines, including clean-up operations, shall not exceed 1.5 tons per month and 15.0 tons per year, in total.

2.2.7 Testing Requirements

None

2.2.8 Monitoring Requirements

None

2.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected seaming machine:

- a. The name and identification number of each VOM containing material used.
- b. The VOM content (weight %) of each VOM containing material used.
- c. Usage of each VOM containing material (tons/month and tons/year).
- d. VOM emissions (tons/month and tons/year) with supporting calculations and documentation.

2.2.10 Reporting Requirements

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

- a. Emissions VOM in excess of the limits in Conditions 2.2.6(a)(ii) based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

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:jws

cc: Region 1
CES
Lotus Notes

Table 1: Annual VOM Emission Limits and Increases^a In VOM Emissions For the Project (Tons/Year)

Affected Units	VOM Emissions	
	Limit	Increase
New Presses P-08 and P-09	30.0	42.7
New Seaming Machines	15.0	15.0
Existing Laminator L33/34	8.03	--- ^b
Existing Press P-06	20.0	--- ^b
Total		57.7
Significance Threshold		40
Greater Than Significant		Yes

Notes:

- Minimal or no increase.
- a. The increase in emissions for a new unit is its permitted emissions (or "limit"). For existing units, increase in emissions is calculated by comparing the past actual emissions and future permitted emissions, if they are greater than the past actual emissions.
- b. A decrease in emissions is expected.

Table 2: VOM Netting Analysis (Tons/Year)

	VOM
Project Emissions Increases	57.7
Project Emissions Decreases ^a	25.1
Project Subtotal	32.6
Contemporaneous ^b Increases/Decreases	
None	0
Contemporaneous Changes Subtotal	0
NET EMISSIONS CHANGE	32.6
Significance Threshold	40
Greater Than Significant	No

Note:

- a. For existing units L33/34 and P-06, the decrease in actual emissions is calculated as the difference between the past actual emissions from calendar years 2007 and 2008 and future permitted emissions, as limited by this permit.
- b. The contemporaneous time period begins August 2004. No other projects have occurred at the source since August 2004 (The seaming machine permitted in Construction Permit 09030015 was not installed. That seaming machine is addressed in this permit in Section 2.2.).