

217/782-2113

LIFETIME OPERATING PERMIT -- REVISED

PERMITTEE

Fisher Container Corporation  
Attn: Environmental Manager  
1111 Busch Parkway  
Buffalo Grove, Illinois 60089

Application No.: 98080081

I.D. No.: 097418AAL

Applicant's Designation: PRESS

Date Received: November 8, 2005

Subject: Flexo Presses

Date Issued: February 28, 2006

Expiration Date: See Condition 1.

Location: 1111 Busch Parkway, Buffalo Grove

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

3 Flexographic Printing Lines with Dryers Controlled by an Existing Catalytic Oxidizer

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

- 1a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
- 2a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and

- iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- c. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
- d. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.
- 3a. Emissions and operation of the 3 flexographic printers controlled by a catalytic oxidizer shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Ink & Thinning Solvent	18.4	185	1.5	14.8
Clean-Up Solvent	---	---	0.7	7.3

These limits are based on a requested 92% overall control efficiency for the ink and thinning solvents, substantiated by stack test, in order to demonstrate compliance with 35 Ill. Adm. Code 218.401(c).  
 Cleanup Solvent Emissions = Cleanup Solvent Used - Cleanup Solvent certified as Reclaimed and Shipped Offsite. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- b. 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 Ill. Adm. Code 218.105.

4. Emissions and operation of the oxidizer and 3 press dryers shall not exceed the following limits:

Natural Gas Usage		Pollutant	Emissions	
(mmscf/Mo)	(mmscf/Yr)		(Tons/Mo)	(Tons/Yr)
2.7	27	NO <sub>x</sub>	0.2	1.4
		CO	0.1	1.2
		VOM	0.01	0.1

These limits are based on maximum fuel usage and AP-42 emission factors.

5. This permit is issued based on the potential to emit (PTE) for hazardous air pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act being less than 10 tons/year of any single HAP or 25 tons/year of any combination of such HAPs, or such less quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program (CAAPP) permit from the Illinois EPA.
6. This permit is issued based upon the source being subject to the VOM control requirements of 35 Ill. Adm. Code 218, Subpart H: "Flexographic and Rotogravure Printing":
- a. For the 3 controlled presses, the Permittee shall utilize a catalytic oxidizer which reduces captured VOM by at least 90%, meeting the requirements of 35 Ill. Adm. Code 218.401(c)(2).
  - b. For the 3 controlled presses, the Permittee shall utilize a catalytic oxidizer and capture system that provides at least an overall reduction of VOM emissions of at least 60%, pursuant to 35 Ill. Adm. Code 218.401(c)(4)(C).
- 7a. The oxidizer system shall be in operation at all times when the associated emission unit(s) are in operation and emitting air contaminants.
- i. The oxidizer 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, before any VOM is fed to the oxidizer, and this temperature shall be maintained during the destruction of VOM.
  - ii. Pursuant to 35 Ill. Adm. Code 218.105(d)(2), the catalytic oxidizer shall be equipped with a monitoring device which is installed, calibrated, maintained, and operated according to vendor specifications at all times the catalytic oxidizer is in use. This device shall monitor the temperature rise across each catalytic oxidizer bed which shall be maintained at the same temperature measured during the most recent stack test operated under similar conditions.

- iii. The temperature before the catalyst bed shall not be below the average gas temperature immediately before the catalyst bed measured during the most recent performance test that demonstrated that the operation was in compliance.
  - b. The capture system and control device shall be operated at all times when at least one of the subject printing lines 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 Ill. Adm. Code 218.105(c) through (f) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.404(e).
  - c. The oxidizer capture and control system shall be operated in a manner consistent with good air pollution control practices.
  - d. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
  - e. The catalytic afterburner shall not be seasonally shut down as would be allowed in 35 Ill. Adm. Code 218.107.
8. Upon written request by the Illinois EPA:
- a. The destruction efficiency and the overall reduction efficiency of the oxidizer system shall be measured according to the procedures in 35 Ill. Adm. Code 218.105 (c) through (f) by an approved testing service, during conditions which are representative of maximum operation.
  - b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A, for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Volatile Organic Material	USEPA Method 25, 25A if outlet VOM cont. < 50 ppmv as C Non CH <sub>4</sub>
  - c. At least 30 days prior to the actual date of the emissions test, 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 and the means by which the operating parameters for the emission unit and any control equipment will be determined.
  - 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.
  - vi. Any proposed use of an alternative test method, with detailed justification.
  - vii. The format and content of the Source Test Report.
- d. Copies of the Final Report(s) for this emissions test shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized. 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
    - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair

- v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration
  - vi. An explanation of any discrepancies among individual tests or anomalous data
- e. The Illinois EPA shall be notified prior to this emissions test to enable the Illinois EPA to observe the test. Notification of the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five 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.
- f. Submittals of information shall be made as follows:
- i. Submittal of Test Plan - one copy to Source Emission Test Specialist and one copy to Permit Section.
  - ii. Notices of Test - one copy to Source Emission Test Specialist, one copy to the Regional Office, and one copy to Permit Section.
  - iii. Final Report - one copy to Source Emission Test Specialist, one copy to the Regional Office, and one copy to Permit Section.
9. The Permittee shall maintain monthly records of the following items:
- a. The owner or operator shall collect and record all the following information each day for each printing line, pursuant to 35 Ill. Adm. Code 218.404(e):
    - i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from 35 Ill. Adm. Code 218.401(a) or (b) to 35 Ill. Adm. Code 218.401(c), the owner or operator of the subject printing line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with 35 Ill. Adm. Code 218.401(c) on and after a date consistent with 35 Ill. Adm. Code 218.106 or on and after the initial start-up date.
    - ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a printing line subject to the

limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(c) shall collect and record all of the following information each day for each printing line and maintain the information at the facility for a period of three years:

- A. Control device monitoring data.
  - B. A log of operating time for the capture system, control device, monitoring equipment and the associated printing line.
  - C. 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.
- iii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject printing line shall notify the Illinois EPA in the following instances:
- A. Any record showing violation of 35 Ill. Adm. Code 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.
  - B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(c) to 35 Ill. Adm. Code 218.401(a) or (b), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(c) to 35 Ill. Adm. Code 218.401(a) or (b), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(c) or (d), respectively.
- b. All VOM and HAP containing materials used (inks, solvents, etc.) (tons/month and tons/year);
  - c. VOM and HAP contents of all materials in (b) (lb/gallon or weight percent);
  - d. Cleanup solvent usage (tons/month and tons/year);
  - e. Cleanup solvent certified as reclaimed and shipped offsite (tons/month and tons/year); and
  - f. VOM and HAP emissions with supporting calculations (tons/month and tons/year).

10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA 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 request for records during the course of a source inspection.
11. 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.
12. 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
13. Persons with lifetime operating permits must obtain a revised permit for any of the following changes at the source:
  - a. An increase in emissions above the amount the emission unit or the source is permitted to emit;
  - b. A modification;
  - c. A change in operations that will result in the source's noncompliance with conditions in the existing permit; or
  - d. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.

Please note this permit revision incorporates the operation of the equipment addressed in Construction Permit No. 04100039.

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

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

DES:RBS:psj

cc: Region 1