

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Selig Sealing Products
Attn: Robert Owen Smith
342 East Wabash
Forrest, Illinois 61741

Application No.: 95120137

I.D. No.: 105045AAJ

Applicant's Designation:

Date Received: July 21, 2011

Subject: Coating and Printing

Date Issued: October 19, 2011

Expiration Date: May 31, 2012

Location: 342 East Wabash, Forrest, Livingston County

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three (3) extruders, six (6) laminating stations and nine (9) flexographic printing stations, natural gas-fired dryers and combustion units, and three (3) polyethylene pellet storage silos controlled by dust collector as described in 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. 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 for 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 establish area source status under the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Printing and Publishing Industry, 40 CFR 63 Subpart KK. This is a result of the federally enforceable production and operating limitations, which restrict a potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
 - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.
- b. Prior to initial 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 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.321(a), 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 which, 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 Ill. Adm. Code 212.321(c).
- 3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 215.204(c), no owner or operator of a paper coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 Ill. Adm. Code Part 215, delivered to the coating applicator:

Paper Coating	kg/l	lb/gal
i. All paper coating except as provided in 35 Ill. Adm. Code 215.204(c)(2)	0.35	(2.9)
ii Specialty High Gloss Catalyzed Coating	0.42	(3.5)

(NOTE: These limitations shall not apply to equipment used for both printing and paper coating)

- b. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.
- 5. This permit is issued based on the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for

Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs.

- 6a. Pursuant to 35 Ill. Adm. Code 215.209, no coating line subject to the limitations of 35 Ill. Adm. Code 215.204 is required to meet 35 Ill. Adm. Code 215.301 or 215.302 after the date by which the coating line is required to meet 35 Ill. Adm. Code 215.204.
- b. This permit is issued based on the source not being subject to 35 Ill. Adm. Code 215.401 (Flexographic and Rotogravure Printing). Pursuant to 35 Ill. Adm. Code 215.402, the limitations of 35 Ill. Adm. Code 215 Subpart P shall not apply to any facility whose aggregate uncontrolled rotogravure and/or flexographic printing press emissions of volatile organic material are limited by operating permit conditions to 907 Mg (1000 tons) per year or less in the absence of air pollution control equipment or whose actual emissions in the absence of air pollution control equipment would be less than or equal to 907 Mg (1000 tons) per year when averaged over the preceding three calendar years.
- 7a. 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 with controls, in order to eliminate the odor nuisance.
- b. The dryers associated with the flexographic printing stations and coating stations shall only be operated with natural gas as the fuel. The use of any other fuel in the dryers requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 8a. Emissions and operation of the coating and printing processes at this source, including Laminator 9 and cleanup activities, shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage and Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Acetone-Based Adhesive Solvent	5.31	50.10
Coreactant	1.64	16.40
Water-Based Adhesive	0.38	3.80
Solvent Based Ink	0.01	0.11
Water-Based Ink	0.80	8.00
Ink Solvent	0.06	0.60
Primer	0.01	0.10
Overcoat	<u>0.01</u>	<u>0.10</u>
	Total:	<u>79.21</u>

These limits are based on the maximum material usage and the maximum VOM content. The VOM and HAP emissions shall be calculated using the following equation:

$$E = [\sum P_i \times d_i \times C_i] / 2,000$$

Where:

E = VOM and HAP emissions (tons);

P_i = material usage (gallons);

d_i = density of material used (lbs/gallon); and

C_i = VOM and HAP content of material used (% by weight).

- b. Operation and emissions of the dryers and ovens associated with flexographic printing presses shall not exceed the following limits:

Total Maximum Firing Rate (mmBtu/Hour)	Pollutant	Emission Factor (lbs/mmscf)	Emissions	
			(Tons/Month)	(Tons/Year)
15.9	CO	84.0	0.59	5.85
	NO _x	100.0	0.70	6.96
	PM	7.6	0.06	0.53
	SO ₂	0.6	0.01	0.04
	VOM	5.5	0.04	0.38

These limits are based on 8,760 hours of operation per year and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- c. This permit is issued based on negligible emissions of particulate matter from the three polyethylene pellet storage silos controlled by dust collector. For this purpose emissions from each emission unit, shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the Laminator shall not exceed 0.90 tons/month and 9.00 tons/year of any single HAP and 2.25 tons/month and 22.50 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 the Laminator not triggering the requirements of Section 112(g) of the Clean Air Act, the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK, and the NESHAP for Paper and Other Web Surface Coating, 40 CFR 63 Subpart JJJJ.
- e. 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).
- 9a. 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:

- b. Pursuant to 35 Ill. Adm. Code 215.208(b), transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Illinois EPA.
12. 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.
13. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 14a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the Conditions of this permit:
- i. The name and identification number of each material as applied;
 - ii. material usage, including solvent, adhesive, ink, coating, clean-up solvent, etc. (gallons/month and gallons/year);
 - iii. Density of each material used, including solvent, adhesive, ink, coating, clean-up solvent, etc.(lbs/gallon);

- iv. VOM and HAP contents of each material used, including solvent, adhesive, ink, coating, clean-up solvent, etc. (% by weight);
 - v. Throughput of raw material, for pellet storage (tons/month and tons/year);
 - vi. Natural gas usage for the source (mmscf/month and mmscf/year); and
 - vii. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAPs from the source, with supporting calculations (tons/month and 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 storage device) 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.
15. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 13a. If there is an exceedance of or a 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 or 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.
- b. 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
2009 Mall Street
Collinsville, Illinois 62234

It should be noted that this permit has been revised so as to include operating of the equipment described in Construction permit 11070040.

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

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

Date Signed: _____

ECB:RBS:jws

cc: FOS Region 3
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coating and printing plant 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 well below the levels (e.g., 100 ton/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAP) 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/Operation</u>	E M I S S I O N S (Tons/Year)						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	Single <u>HAP</u>	Combined <u>HAPs</u>
Coating and Printing Process					79.21	#	#
Three Polyethylene Pellet Storage Silos			1.32				
Fuel Combustion	<u>5.85</u>	<u>6.96</u>	<u>0.53</u>	<u>0.04</u>	<u>0.38</u>	--	--
Totals	<u>5.85</u>	<u>6.96</u>	<u>1.85</u>	<u>0.04</u>	<u>79.97</u>	9.0	22.5