

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Bio Packaging L.L.C.
Attn: Gennadiy Krivoruchko
909 Tower Road
Mundelein, Illinois 60060

<u>Application No.:</u> 06110027	<u>I.D. No.:</u> 097115ACR
<u>Applicant's Designation:</u>	<u>Date Received:</u> November 13, 2006
<u>Subject:</u> Printed Packaging Films	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 909 Tower Road, Mundelein, Lake County, 60060	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one (1) Flexographic Printing Press 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. 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), 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 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 the Printing and Publishing Industry, 40 CFR 63 Subpart KK.
 - iii. 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 requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - iv. 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 218.401 (Flexographic and Rotogravure Printing).

- 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.
2. Pursuant to 35 Ill. Adm. Code 218.301, 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 unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: if no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
- 3a. This permit is issued based upon the flexographic printing press at this source not being subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK. This is a result of the federally enforceable limitations of this permit restricting potential HAP emissions to below major source threshold levels defined in 40 CFR 63.2.
- b. This permit is issued based upon 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. Pursuant to 40 CFR 63.3290, the provisions of 40 CFR 63 Subpart JJJJ apply to each new and existing facility that is a major source of HAP, as defined in 40 CFR 63.2, at which web coating lines are operated.
- 4a. This permit is issued based on the source not being subject to 35 Ill. Adm. Code 218.187 (Other Industrial Solvent Cleaning Operations). Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B), notwithstanding 35 Ill. Adm. Code 218.187(a)(1) cleaning operations for emission units within the following categories shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
- i. Flexible package printing;
 - ii. Paper, film, and foil coating;
- b. This permit is issued based upon the flexographic printing press at this source not being subject to the VOM control requirements of 35 Ill. Adm. Code 218.401 (Flexographic and Rotogravure Printing). This is a result of the federally enforceable production and operating limitations, which restrict the maximum theoretical emission of VOM from this facility to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year. Pursuant to 35 Ill. Adm. Code 218.402(a), except as otherwise provided in 35 Ill. Adm. Code 218.401, the limitations of 35 Ill. Adm. Code 218.401 apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources if:

- i. Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source ever exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision; or
 - ii. The flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source have a potential to emit 22.7 Mg (25 tons) or more of VOM per year.
- 5a. Pursuant to 35 Ill. Adm. Code 218.401(d), no owner or operator of subject flexographic or rotogravure printing lines that print flexible packaging or print flexible packaging and non-flexible packaging on the same line shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with the subject flexographic or rotogravure printing lines to be kept, stored, or disposed of in any manner other than in closed containers, or conveyed from one location to another in any manner other than in closed containers or pipes, except when specifically in use.
- b. Pursuant to 35 Ill. Adm. Code 218.402(b), the limitations of 35 Ill. Adm. Code 218.401(d) shall apply to all owners or operators of flexographic or rotogravure printing lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, at a source where the combined emissions of VOM from all flexographic and rotogravure printing lines total 6.8 kg/day (15 lbs/day) or more (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines), in the absence of air pollution control equipment.
6. 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.
- 7a. Emissions and operation of the flexographic printing press, including clean-up, shall not exceed the following limits:

VOM Usage		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
2.5	24.5	2.5	24.5

These limits are based on maximum material usage and VOM content.

b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 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 requirements to obtain a CAAPP permit from the Illinois EPA and the requirements of the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.

c. VOM and HAP emissions shall be determined as follows:

$$E = \Sigma(I_i \times d_i \times C_i) + \Sigma(S_j \times d_j \times C_j) - \Sigma(W_p \times d_p \times C_p)]/2,000$$

Where:

E = Emissions of VOM or HAP (tons/month);

I_i = Ink usage of each type on the controlled press (gallons/month);

d_i = Density of ink of each type (lbs/gallon);

C_i = VOM or HAP content in the ink of each type, as applied on the controlled press (% by weight);

S_j = Clean-up solvent usage of each type (gallons/month);

d_j = Density of clean-up solvent of each type (lbs/gallon);

C_j = VOM or HAP content of the clean-up solvent of each type (% by weight);

W_p = Certified amount of waste shipped off for disposal (gallons/month);

d_p = Density of the waste (lbs/gallon);

C_p = Certified VOM or HAP content of the waste ((% by weight);

d. 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).

8a. 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 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
9. Pursuant to 35 Ill. Adm. Code 218.404(a), 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 to establish the records required under 35 Ill. Adm. Code 218.404.
 10. 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.

- 11a. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), any owner or operator of a printing line which is exempted from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line referenced in 35 Ill. Adm. Code 218.404(b) shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating and ink as applied on each printing line.
 - ii. The VOM content and the volume of each coating and ink as applied each day on each printing line.
- b. Pursuant to 35 Ill. Adm. Code 218.404(h), all records required by 35 Ill. Adm. Code 218.404(f) and (g) shall be retained for at least three years and shall be made available to the Illinois EPA upon request.
- 12a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Total usage of each ink, coating, cleaning solvents, and any other VOM or HAP containing materials (pounds per month and tons per year);
 - ii. The VOM and HAP content of each ink, coating, cleaning solvents, and any other VOM containing materials used with basis, accompanied by a copy of the supporting information (e.g., supplier data sheet or laboratory analysis report), (% VOM by weight); and
 - iii. Monthly and annual emissions of 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.

13a. Pursuant to 35 Ill. Adm. Code 218.404(b) (3), any owner or operator of a printing line which is exempted from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceeds 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices, or that the combined potential to emit of all flexographic and rotogravure printing lines at the source equals or exceeds 22.7 Mg (25 tons) of VOM in any calendar year, by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.

b. Pursuant to 35 Ill. Adm. Code 218.404(g) (2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401(d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.401(d) by sending a description of the violation and copies of records documenting such violations to the Illinois EPA within 30 days following the occurrence of the violation.

14a. 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 or 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:

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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.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:DWH:

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the 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 below the levels, (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such 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>	Single <u>HAP</u>	Combined <u>HAPs</u>
Flexographic Printing Press	<u>24.50</u>	<u>7.90</u>	<u>19.90</u>
Totals	<u>24.50</u>	<u>7.90</u>	<u>19.90</u>

DWH: