

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Quality Bags, Inc.
Attn: Glenn Rivera
575 South Vista Avenue
Addison, Illinois 60101

Application No.: 95090100

I.D. No.: 043005ALB

Applicant's Designation:

Date Received: November 4, 2005

Subject: Flexographic Printing on Plastic Bags

Date Issued:

Expiration Date:

Location: 575 South Vista Avenue, Addison

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

Four (4) Wide Web Flexographic Printing Presses Controlled by a 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 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 per year of volatile organic material (VOM), 25 tons per year of total hazardous air pollutants (HAPs), and 10 tons per year for each single HAP). As a result the source is excluded from the requirement 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 limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - 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. This permit is issued based on the wide-web flexographic printing not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hazardous Air Pollutants (HAP) emissions from the printing operations, 40 CFR 63 Subpart KK by virtue of the limits on the emissions of HAP established in this permit such that this source is not a major source, as defined in 40 CFR 63.2.

- 3a. Pursuant to 35 Ill. Adm. Code 218.401(c), 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 requirements in 35 Ill. Adm. Code 218.401 (c) (1), (c) (2), or (c) (3) and 35 Ill. Adm. Code 218.401(c) (4), (c) (5) and (c) (6).
- i. An incineration system is used which reduces the captured VOM emissions by at least 90 percent by weight; and
 - ii. The printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 60 percent where a flexographic printing line is employed; and
 - iii. The control device is equipped with the applicable monitoring equipment specified in 35 Ill. Adm. Code 218.105(d) (2) and except as provided in 35 Ill. Adm. Code 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; and
 - 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 Ill. Adm. Code 218.105(c) through 35 Ill. Adm. Code 218.105(f) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.404(e).
- b. Pursuant to 35 Ill. Adm. Code 218.402(b), upon achieving compliance with 35 Ill. Adm. Code 218 Subpart H, the flexographic and rotogravure printing lines are not required to meet 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Flexographic and rotogravure printing lines exempt from 35 Ill. Adm. Code 218 Subpart H are subject to 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Rotogravure or flexographic equipment used for both roll printing and paper coating is subject to 35 Ill. Adm. Code 218 Subpart H.
- 4a. The catalytic afterburner shall be in operation at all times when at least one printing line is in operation.
- b. The catalytic afterburner shall not be seasonally shut down as would be allowed in 35 Ill. Adm. Code 218.107.
 - c. The catalytic oxidizer inlet temperature shall be maintained at a set point of 650°F and not drop below 640°F, as operated during the November 10, 1999 stack test.

- d. The temperature rise across the catalytic bed must be maintained at 150°F while operating under similar conditions documented during the 1999 stack test.
- 5a. The Permanent Total Enclosure (PTE) must be maintained as it was during the 1999 stack test, which verified the PTE met all the criteria of USEPA Method 204.
- b. Prior to making any modification to the PTE, the Illinois EPA shall be notified and approve the modification and, after the modifications are made, the PTE will be verified to meet USEPA Method 204.
- 6. The Permittee, shall in accordance with the manufacturer(s) and/or vendor(s) recommendation, 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.
- 7a. Emissions and operation of the printing presses and associated equipment, including clean-up, shall not exceed the following limits:

Single HAP Usage		VOM Usage		VOM Emissions	
<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
0.9	9	24	240	2.4	24

These limits are based on maximum material usage, VOM and HAP contents, and an overall control efficiency of 90% for the oxidizer, for all inks, substantiated by the most recent stack test.

- b. Note that there is a "nested" limit on the emissions of the combination of HAPs as a result of the limit on VOM emissions. The HAPs emitted at this source have been determined to be VOMs and therefore limiting VOM emissions also limits HAP emissions.
- c. Emissions of VOM and HAP shall be determined as follows:

$$E = \left[\sum (I_i \times C_i) \times (1 - (CE \times DE = 0.9)) + \sum (S_j \times C_j) - \sum (W_p \times C_p) \right] / 2,000$$

- E = VOM and HAP emissions (tons/month)
- I_i = Ink usage of each type on the controlled presses (gallons/month)
- C_i = VOM and HAP contents in the ink of each type, as applied on the controlled presses (lbs/gallon)
- S_j = Clean-up solvent usage of each type (gallons/month)
- C_j = VOM and HAP contents of the clean-up solvent of each type (lbs/gallon)

W_p = Certified amount of waste ink or solvent or both shipped offsite for disposal (gallons/month)

C_p = Certified VOM and HAP contents of the waste ink or solvent or both (lbs/gallon)

CE^* = Capture efficiency of the control system, decimal fraction

DE^* = Destruction efficiency of the control system, decimal fraction

* Values of CE and DE shall not exceed those obtained during the most recent stack test.

- d. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not be less than 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit from the Illinois EPA.
- e. Compliance with 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).
8. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(ii), an owner or operator That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the afterburner or carbon adsorber is in use. The continuous monitoring equipment must monitor for each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
- 9a. 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.

- b. Pursuant to 35 Ill. Adm. Code 218.404(e)(2), any 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 the following information each day for each printing line and maintain the information at the facility for a period of three years:
 - i. Control device monitoring data.
 - ii. A log of operating time for the capture system, control device, monitoring equipment and the associated printing line.
 - iii. 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.
- c. The Permittee shall maintain records of the following items demonstrate compliance with the conditions of this permit:
 - i. Names and amounts of inks and all other VOM or HAP containing materials used (gallons/month) and their VOM and HAP contents (lbs/gallon);
 - ii. Names and amount of VOM or HAP containing solvent used for clean-up (gallons/month) and their VOM and HAP content (lbs/gallon);
 - iii. Certified amount of waste ink or solvent or both shipped off-site (tons/month and tons/year) and VOM and HAP contents; and
 - iv. Monthly and annual VOM and HAP emissions with supporting calculations using equation in Condition 3(b) (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 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) 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.
- 11a. Pursuant to 35 Ill. Adm. Code 218.404(e) (3), any 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 notify the Illinois EPA in the following instances:
 - i. 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.
 - ii. 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. 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

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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: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the flexographic printing presses 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 per year of VOM, 25 tons per year of total HAPs, and 10 tons per year of each 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>Equipment</u>	<u>VOM</u> <u>(Tons/Year)</u>	<u>Single</u> <u>(Tons/Year)</u>	<u>HAPs</u> <u>Total</u> <u>(Tons/Year)</u>
4 Flexographic Printing Presses and Associated Equipment and Cleanup Operations	24	9	24

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