Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

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November 14, 2013

Mr. James Barnhart, President
Package Printing Company, Inc.
33 Myron Street
West Springfield, MA 01089

Re: West Springfield
Transmittal No.: X257355
Application No.: WE-13-027
FMF No.: 131222
AIR QUALITY PLAN APPROVAL

Dear Mr. Barnhart:

The Massachusetts Department of Environmental Protection, Western Regional Office ("MassDEP"), has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed installation of a new 8-color Comexi flexographic printing press at your 33 Myron Street facility in West Springfield, Massachusetts ("Facility"). The Application bears the seal and signature of Massachusetts Registered Professional Engineer James E. Gagnon, P.E. # 29550.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this Plan Approval for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner / operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

Package Printing Company, Inc. ("Package Printing") is proposing to install and operate a new 8-color Comexi flexographic printing press at their West Springfield facility. The press has a maximum line speed of 1,000 feet per minute and will be installed in the room that formerly contained an 8-color CI flexographic press installed in 2006 under MassDEP Approval #1-P-06-005. That press has been removed from the facility and that MassDEP Approval is no longer in effect.

The existing press room will function as a room enclosure to achieve 100% capture of volatile organic compounds ("VOC") fugitive emissions and will meet the EPA criteria for a permanent total enclosure in accordance with the requirements of U.S. EPA Procedure T.

The exhaust from the new press will be directed to the existing Tec Systems Model HXE 111-6000 catalytic oxidizer approved in 1999 in MassDEP Approval #1-P-99-003. The catalytic oxidizer will continue to control VOC and hazardous air pollutant ("HAP") emissions from an existing 8-color Flexotecnica flexographic printing press approved by MassDEP in the same 1999 Approval.

The catalytic oxidizer has been stack tested at greater than 99% destruction efficiency, and is being required in this Plan Approval to meet a Best Available Control Technology ("BACT") requirement minimum VOC/HAP destruction efficiency of 98.0%. Additionally, due to capacity limitations of the catalytic oxidizer, only one of the two presses at a time will be allowed to operate and duct its exhaust to the catalytic oxidizer.

In the event the Tec 6000 catalytic oxidizer becomes inoperable due to an emergency (see definition of "emergency" in footnote **(1)** of Table 6 Special Conditions) , Package Printing has requested that they be allowed to continue to operate the new 8-color Comexi press for up to two weeks while ducting its exhaust through the other smaller catalytic oxidizer at the site (DEC-E-Tec 4000) which is currently not being used. This smaller oxidizer was stack tested in 2008 and achieved the manufacturer's guaranteed 97.0% VOC destruction efficiency. To be so utilized, this smaller oxidizer must be maintained in accordance with the manufacturer's recommendations it and would be required to meet a minimum of 97.0% VOC destruction efficiency upon restart. This emergency connection to the Dec-E-Tec 4000 oxidizer will only be made for the new Comexi press, and while connected, the new press line speed will be restricted from its maximum of 1,000 feet per minute to 666 feet per minute. This will result in VOC emissions equivalent to the new press operating at full speed into a 98.0% VOC destruction efficiency oxidizer.

Potential VOC emissions from the new press after 98% VOC control will be 3.6 tons per year ("tpy"). There will be an additional 1.8 tpy of fugitive VOC emissions from mix making and waste handling, assuming 1% fugitive losses from 180 tons of VOC containing raw materials received at the facility.

The current inks and solvents do not contain hazardous air pollutants (HAP). To make enforceable Package Printing's status as a non-major source of HAP, they are requesting a facility-wide restriction of < 10 tpy HAP received at the facility and < 1 tpy HAP emitted from the facility (after control).

2. EMISSION UNIT IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1

Emission Unit	Description	Design Capacity	Pollution Control Device (PCD)
EU 1 (Existing)	8-color Flexotecnica flexographic printing press	700 feet/minute	Tec Systems Model HXE 111-6000 catalytic oxidizer w/2.7 MMBtu/hr burner
EU 3 (New)	8-color Comexi flexographic printing press	1000 feet/minute	Tec Systems Model HXE 111-6000 catalytic oxidizer w/2.7 MMBtu/hr burner
EU 4	fugitive VOC emissions from mix making and waste handling	180 tons VOC in raw materials processed per year	none

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION AND EMISSION LIMITS

1) Package Printing shall limit monthly and yearly VOC/HAP emissions in accordance with the limits specified in Table 1.

Table 1

Emission Unit	Operational / Production Limits	Air Contaminant	Emission Limits lb/month (1) (after control)	Emission Limits tons/year (2) (after control)
EU 1 (Existing)	≤ 5.4 lb/hr VOC/HAP emission rate after control ≥ 98.0% VOC/HAP destruction efficiency of catalytic oxidizer 100% VOC/HAP capture efficiency of room enclosure	VOC/HAP	1800	3.8
EU 3 (New)	≤ 2.0 lb/hr VOC/HAP emission rate after control ≥ 98.0% VOC/HAP destruction efficiency of catalytic oxidizer 100% VOC/HAP capture efficiency of room enclosure	VOC/HAP	1000	3.6
EU 4	receive < 180 tons VOC/HAP in raw materials per year (2)	VOC/HAP	400	1.8
Facility-Wide	receive < 10 tons HAP in raw materials per year (2)	HAP (total or individual)	200	1.0

Definitions: VOC = volatile organic compounds; HAP = hazardous air pollutant; VOC/HAP = VOC and/or HAP; lb = pound; hr = hour

(1) Based on a calendar month.

(2) Based on a 12 month rolling total. Compliance with a 12 month rolling total VOC/HAP limit is determined each month by adding the previous 12 months of VOC/HAP use and comparing the total to the VOC/HAP limit specified above.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3

Emission Unit	Monitoring/Testing Requirements
EU 1 & EU 3	**1)** Package Printing shall continuously monitor and record the catalyst inlet temperature and the exhaust gas temperature (°F). **2)** Package Printing shall ensure that the catalyst inlet temperature is a minimum of 600° F before operation and continuously during the operation of these emission units. **3)** Package Printing shall operate the catalytic oxidizer inlet and exhaust gas temperature monitoring system at all times that the oxidizer is operating, except for periods of calibration checks and preventive maintenance, and shall obtain valid temperature data for at least 90% of the hours per quarter during which the catalytic oxidizer is operating. **4)** Package Printing shall monitor any bypass damper(s), expansion joints, access doors, or any such potential leak point in ductwork carrying VOC laden air to the catalytic oxidizer for VOC leakage at least once per calendar year using an EPA Method 21 certified instrument. Any EPA Method 21 certified instrument shall be maintained and calibrated in accordance with the manufacturer's recommendations. A leak for the purposes of this Plan Approval is an instrumental reading 100 ppm or greater. Any leak so discovered shall be promptly repaired within 14 days of discovery. **5)** Package Printing shall conduct stack testing of the catalytic oxidizer for VOC inlet and outlet emission rate, and VOC destruction efficiency while operating at or near 80% (minimally) of the maximum VOC inlet loading. **6)** Package Printing shall ensure that all emission compliance tests are completed within 180 days after initial start-up of the new printing press/catalytic oxidizer. **7)** Package Printing shall submit an emission compliance test protocol for review and written MassDEP approval at least 30 days prior to the date of actual testing. **8)** Package Printing shall submit the final reports for the emission compliance tests to the MassDEP within 60 days after the completion of the tests.

Table 4	
Emission Unit	**Recordkeeping Requirements**
EU 1 & EU 3	**1)** Package Printing shall maintain records detailing for each calendar month and for each rolling 12-month period: a) the number of pounds of inks applied, and b) the number of pounds of diluent/thinner used, and c) the VOC/HAP content of the inks and diluents/thinners used, and d) the lb VOC/HAP emitted before and after controls. **2)** Package Printing shall maintain on-site records of the catalyst inlet temperature and the exhaust gas temperature, and all supporting information, including, at a minimum, all calibration and maintenance records, all original strip/circular charts or raw digital data, the operating conditions existing at the time of the measurement(s), and copies of any other information required to interpret the monitoring data. **3)** Package Printing shall maintain records of the dates the catalyst was most recently added to, replaced, changed, and/or tested for efficiency. **4)** Package Printing shall maintain records of the annual leak determination that is made using an EPA Method 21 certified instrument. Records shall also be maintained verifying that leak repair is accomplished within the 14 day allowed time period.
EU 4	**5)** Package Printing shall maintain rolling 12-month total records of the amount of VOC/HAP contained in raw materials received into the facility.
Facility-Wide	**6)** Package Printing shall ensure that all records required by this MassDEP Approval are maintained for a minimum of 5 years.

Table 5	
Emission Unit	**Reporting Requirements**
EU 1 & EU 3	**1)** Package Printing shall submit annual reports to MassDEP documenting that the catalyst efficiency is not degrading. This determination shall be made by testing catalyst activity in accordance with the oxidizer vendor's/manufacturer's recommendations.
Facility-Wide	**2)** Package Printing shall report within 3 business days to the MassDEP all instances of deviations from the permit requirements specified herein. This report shall include the deviation itself, including those attributable to upset conditions, the probable cause of the deviation, and any corrective actions or preventive measures taken. **3)** Package Printing shall accurately report to MassDEP in accordance with 310 CMR 7.12, all information as required by the source Registration/Emission Statement Form. The facility shall note any minor changes that have taken place which did not require Plan Approval in accordance with 310 CMR 7.02, 7.03, and other applicable regulations.

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6

Emission Unit	Special Conditions
EU 1 & EU 3	**1)** Package Printing shall ensure that the catalytic oxidizer operates at all times that the flexographic presses are operating. **2)** Package Printing shall ensure that both presses do not operate simultaneously. Only one press at a time may be ducted to the catalytic oxidizer control device. **3)** Package Printing shall adhere to the criteria for VOC capture efficiency - U.S. EPA Procedure T guidelines for permanent total enclosures (PTE) for the flexographic presses and room enclosure(s). **4)** Package printing shall ensure that all press cleaning operations are conducted in the press permanent total enclosure while the enclosure is being ducted to the catalytic oxidizer.
EU 3	**5)** Package Printing may, in the event of an emergency(1), operate EU 3 while connected to the DEC-E-Tec 4000 catalytic oxidizer provided that: a. the DEC-E-Tec 4000 catalytic oxidizer catalyst activity is tested at least once per calendar year, the catalytic oxidizer is maintained in accordance with the manufacturer's recommendations, and the catalytic oxidizer maintained in a condition such that it is capable of operating at a minimum 97% VOC destruction efficiency upon startup and continuously thereafter, and b. the emission unit is shut down as soon as the Tec Systems Model HXE 111-6000 catalytic oxidizer enters the emergency condition that necessitates switching oxidizers, and c. the emission unit continues to be housed in a total room enclosure that is capable of capturing 100% of the press VOC emissions for ducting to the catalytic oxidizer, and d. the emission unit is operated at no greater than 666 feet per minute line speed while connected to the DEC-E-Tec 4000 catalytic oxidizer, and e. operation under these emergency conditions continues for no more than 14 consecutive calendar days, and f. MassDEP is notified of the emergency in writing no later than the third calendar day after the start of the emergency period, and g. the testing, monitoring, recordkeeping, reporting, and special conditions of this Plan Approval continue to be met while emergency operation continues, including monitoring and recording of line speed.
Facility-Wide	**6)** Package Printing shall keep clean-up solutions containing VOCs in tightly covered containers during transport and storage; and cleaning rags used in conjunction with the cleanup solution shall be placed, when not in use, in closed containers and collected for proper disposal. Package Printing shall store and dispose of all volatile organic compounds in a manner which will minimize evaporation to the atmosphere.

(1) *An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God. An emergency shall not include oxidizer operation outside of the manufacturer's specifications that is caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, or operator error.*

B. Package Printing shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7

Emission Unit	Stack Height Above Ground	Stack Inside Exit Dimensions	Stack Gas Exit Velocity Range	Stack Gas Exit Temp. Range
EU 1 & EU 3	46 feet	2.5 feet	16-38 feet per second	300 – 400 deg. F

GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.

C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.

D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.

F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.

G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.

H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.

I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.

K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

7. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

8. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars ($100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact John Kirzec by telephone at (413) 755-2225, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

_____
Marc Simpson
Permit Chief
Western Region

JK/jk

Package Printing NM 2013-11-14.docx
ecc: Peter Czapienski, WERO
Yi Tian, Boston