



State of Ohio Environmental Protection Agency

**STREET ADDRESS:**

Lazarus Government Center  
50 W. Town St., Suite 700  
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184  
www.epa.state.oh.us

**MAILING ADDRESS:**

P.O. Box 1049  
Columbus, OH 43216-1049

8/8/2008

Certified Mail

Paul Banfield  
Automated Packaging Systems  
Automated Packaging Systems, Inc.  
13555 McCracken Road  
Garfield Heights, OH 44125

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 1318226136  
Permit Number: 13-04751  
Permit Type: Initial Installation  
County: Cuyahoga

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Cleveland Division of Air Quality. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification  
Cleveland Division of Air Quality

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install  
for  
Automated Packaging Systems**

Facility ID: 1318226136  
Permit Number: 13-04751  
Permit Type: Initial Installation  
Issued: 8/8/2008  
Effective: 8/8/2008





**Air Pollution Permit-to-Install**  
for  
Automated Packaging Systems

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 13-04751  
**Facility ID:** 1318226136  
**Effective Date:** 8/8/2008

## Authorization

Facility ID: 1318226136  
Facility Description: Printed polyethylene film  
Application Number(s): A0009492  
Permit Number: 13-04751  
Permit Description: Flexographic Printing Press Line #10 for printing on polyethylene film with drying oven and RTO (K015).  
Permit Type: Initial Installation  
Permit Fee: \$200.00  
Issue Date: 8/8/2008  
Effective Date: 8/8/2008

This document constitutes issuance to:

Automated Packaging Systems  
Automated Packaging Systems, Inc.  
13555 McCracken Road  
Garfield Heights, OH 44125

Of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality  
Penton Media Building, 4th Floor  
1300 East 9th Street  
Cleveland, OH 44114  
(216)664-2297

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 13-04751  
**Facility ID:** 1318226136  
**Effective Date:** 8/8/2008

## Authorization (continued)

Permit Number: 13-04751  
 Permit Description: Flexographic Printing Press Line #10 for printing on polyethylene film with drying oven and RTO (K015).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>K015</b>
Company Equipment ID:	Flexographic Printing Press Line #10
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 13-04751  
**Facility ID:** 1318226136  
**Effective Date:** 8/8/2008

## **A. Standard Terms and Conditions**



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 2.a), Severability Clause
  - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A. 9., Reporting Requirements
  - (5) Standard Term and Condition A. 10., Applicability
  - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A. 14., Public Disclosure
  - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A. 16., Fees
  - (10) Standard Term and Condition A. 17., Permit Transfers

## **2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:



- (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Cleveland Division of Air Quality.
  - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Cleveland Division of Air Quality. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Cleveland Division of Air Quality every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Cleveland Division of Air Quality in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **6. Compliance Requirements**

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on



information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Cleveland Division of Air Quality concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

**8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:



- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Cleveland Division of Air Quality.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Cleveland Division of Air Quality. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on



which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

## **13. Construction Compliance Certification**

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.



**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Cleveland Division of Air Quality must be notified in writing of any transfer of this permit.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 13-04751  
**Facility ID:** 1318226136  
**Effective Date:** 8/8/2008

## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Applicable Emissions Limitations and/or Control Requirements
  - a) Emissions from this facility shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (D) Synthetic Minor to avoid MACT	9.9 tons of any single hazardous air pollutant as a rolling 12-month summation for the entire facility.  24.0 tons of combined hazardous air pollutants as a rolling 12-month summation for the entire facility.

- b) Additional Terms and Conditions

(1) None

3. Operational Restrictions

- a) The maximum annual HAP material usage limitations for emissions units controlled by the thermal oxidizers at the facility shall not exceed those specified by the formula listed below, based on a rolling 12-month summation.

$$n \sum_{i=1} \text{VOL}_i \times D_i \times \% \text{HAP}_i \times (1 \text{ ton}/2000 \text{ pounds}) \times (1 - \text{CE} \times \text{DE}) = \text{Ehap}$$

Where:

- n = number of coatings/cleanup materials employed
- VOL<sub>i</sub> = volume usage of coating/cleanup material i, gallons/month
- D<sub>i</sub> = Density of material i, pounds/gal
- %HAP<sub>i</sub> = percent by weight of the single or total HAP in material i
- CE = capture efficiency by weight
- DE = destruction efficiency by weight
- Ehap = HAP emissions in tons/month



The permittee shall document the monthly HAP material usage by tracking the monthly coating and cleanup material usage for each press at the facility with the density of each material, the HAP content, the emission capture efficiency by weight, and the emission control efficiency by weight, to calculate total monthly actual HAP emissions generated by emissions units controlled by the thermal oxidizers. For emissions units that are not controlled by the thermal oxidizer, track the monthly material usage with the density and HAP content.

- b) The maximum annual HAP material usage rates\* (from coatings and cleanup) for the facility shall not exceed 9.9 tons per year of any single HAP and 24 tons per year of combined HAPs, based on a rolling, 12-month basis.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP material usage levels specified in the following table:

Month	Maximum Allowable Single HAP (Tons)	Cumulative Emissions of Combined HAPs (Tons)
1	0.83	2.0
1-2	1.65	4.0
1-3	2.48	6.0
1-4	3.30	8.0
1-5	4.13	10.0
1-6	4.95	12.0
1-7	5.78	14.0
1-8	6.60	16.0
1-9	7.43	18.0
1-10	8.25	20.0
1-11	9.08	22.0
1-12	9.90	24.0

\* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the HAP material used is emitted.

- c) After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP material usage limitations shall be based upon the rolling 12-month summations of the material usage of single and combined HAPs.

Single HAP material usage		
Current month tons of single HAP	+	Previous 11 months tons of single HAP
		Total 12-month ≤ 9.9 tons of single HAP
Combined HAPs material usage		
Current month tons of combined HAPs	+	Previous 11 months tons of combined HAPs
		Total 12-month ≤ 24.0 tons of combined HAPs



4. Monitoring and/or Recordkeeping Requirements

a) The permittee shall maintain monthly records of the following information for all emissions units at the facility:

- (1) The single and combined HAP material usage rate for each month; and
- (2) Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the single and combined HAP material usage rates.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative single and combined HAP material usage rates for each calendar month.

b) The permittee shall keep and maintain monthly records of single HAP material usage and combined HAPs material usage for all emissions units at the facility on a rolling 12-month basis after the first 12 calendar months of operation following the issuance of this permit:

Single HAP material usage		
Current month	Previous 11 months	Total 12-month
Tons of single HAP	+ tons of single HAP	= tons of single HAP
Combined HA's material usage		
Current month	Previous 11 months	Total 12-month
Tons of combined HAPs	+ tons of combined HAPs	= tons of combined HAPs

These records, as well as any supporting analyses and computations, shall be retained in the company's files (on site) for a period of not less than five years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

5. Reporting Requirements

a) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month allowable cumulative single and combined HAP material usage levels. The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions of this permit.

6. Testing Requirements

a) Compliance with the emission limitation(s) in 2.a) of these terms and conditions shall be determined in accordance with the following method(s):

- (1) Emission Limit  
9.9 tons per rolling, 12-month period for any single HAP for the entire facility.
- Applicable Compliance Method



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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**Permit Number:** 13-04751  
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Compliance shall be determined in accordance with the recordkeeping from 4. above.

(2) Emission Limit

24 tons per rolling, 12 month period for combined HAPs for the entire facility.

Applicable Compliance Method

Compliance shall be determined in accordance with the recordkeeping from 4. above.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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## **C. Emissions Unit Terms and Conditions**



**1. K015, Flexographic Printing Press Line #10**

**Operations, Property and/or Equipment Description:**

Flexographic Printing Press Line #10 for printing on polyethylene film with drying oven and two RTOs

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(6), d)(7), d)(8), and d)(9)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 6.9 lbs VOC/hr(stack). See b)(2)a. below.</p> <p>Volatile Organic Compound (VOC) emissions shall not 17.28 lbs VOC/hr(fugitive). See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Nonattainment New Source Review	34.26 tons per year of VOC as a rolling 12- month summation. See c)(2) below.
c.	OAC rule 3745-21-09 (Y)(1)(b)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the OAC rule 3745-31-05 (A)(3).

(2) Additional Terms and Conditions

a. Maintain and operate two regenerative thermal oxidizers (RTO) operating in tandem as follows:

i. The permittee shall employ a capture system which shall capture not less than 80%, by weight, of all VOC emissions from this emission unit.

ii. The permittee shall employ a control system which shall control not less than 90%, by weight, of the VOC emissions captured.



c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The maximum annual VOC material usage rates\* (from coatings and cleanup) for this emissions unit shall not exceed 34.26 tons VOC per year, based upon a rolling, 12-month summation of the VOC material usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC material usage levels specified in the following table:

Month	Maximum Allowable Cumulative Material Usage of VOC (Tons)
1	2.86
1-2	5.7
1-3	8.6
1-4	11.4
1-5	14.3
1-6	17.1
1-7	20.0
1-8	22.9
1-9	25.8
1-10	28.6
1-11	31.5
1-12	34.3

\* For the purpose of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC material usage limitations shall be based upon the rolling 12-month summations of the material usage of VOC.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.
- (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired temperature. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.



- (3) The permittee, having chosen to demonstrate compliance with the capture and control efficiency or overall control efficiency requirements through the use of a thermal incinerator, shall collect and record the following information each day for the control equipment:
  - a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
  - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
- (4) The permittee shall collect and record the following information monthly for the purpose of determining annual VOC emissions:
  - a. the name and identification number of each coating, as applied;
  - b. the VOC content of each coating, as applied, in pounds per gallon;
  - c. the number of gallons of each coating employed;
  - d. the name and identification of each cleanup material employed;
  - e. the number of gallons of each cleanup material employed;
  - f. the VOC content of each cleanup material, in pounds per gallon;
  - g. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, in pounds or tons; and
  - h. the calculated, controlled VOC emission rate for all coatings and cleanup materials, in pounds or tons determined in accordance with f)(1)c. (the controlled VOC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance).
- (5) The permittee shall collect and record the total VOC, emissions from all coatings and clean up materials employed, in tons, calculated from the monthly records in Section (3)d. above, for this emissions unit for the purpose of determining annual VOC emissions based on a rolling, 12-month summation of emissions.



(6) The permit to install for this emissions unit K015 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The Ohio EPA's "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y} = 4 \frac{TLV}{XY} = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Pollutant: Ethanol  
 TLV (mg/m3): 1,844  
 Maximum Hourly Emission Rate (lbs/hr): 7.21  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 103.1



MAGLC (ug/m3): 44,863.18

Pollutant: Heptane

TLV (mg/m3): 1,639.26

Maximum Hourly Emission Rate (lbs/hr): 5.64

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 80.65

MAGLC (ug/m3): 39,030.09

Pollutant: 2-Propanol

TLV (mg/m3): 491.53

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5.72

MAGLC (ug/m3): 11,703.18

Pollutant: Propyl Acetate

TLV (mg/m3): 835.42

Maximum Hourly Emission Rate (lbs/hr): 1.16

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.59

MAGLC (ug/m3): 19,890.93

Pollutant: N-Propanol

TLV (mg/m3): 491.53

Maximum Hourly Emission Rate (lbs/hr): 9.41

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 134.42

MAGLC (ug/m3): 11,703.18

The permittee, has demonstrated that emissions of toxic contaminants from emissions units are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic contaminant in accordance with ORC 3704.03(F).

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous permitted level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
  - (2) The permittee shall submit quarterly summaries of the following records:



- a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
- b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (3) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
- (4) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

6.9 lbs VOC/hr

Applicable Compliance Method

Compliance shall be determined using Method 25 or 25A from 40 CFR Part 60. See f)(2) below.

- b. Emission Limitation:

17.26 lbs VOC/hr (fugitive)

Applicable Compliance Method

Compliance shall be determined using Method 25 or 25A from 40 CFR Part 60. See f)(2) below.

- c. Emission limitation:

34.26 Tons VOC per rolling, 12 month period

Applicable Compliance Method:

Compliance shall be determined by calculating the monthly and rolling 12-month emissions using the amount of coatings used and cleanup materials employed using the following equation to determine monthly emissions:



$$\sum_{i=1}^n \text{VOL}_i \times \text{VOC}_i \times (1 \text{ ton}/2000 \text{ pounds}) \times (1 - \text{CE} \times \text{DE}) = \text{Evoc}$$

Where:

n = number of coatings/cleanup materials employed

VOL<sub>i</sub> = volume usage of coating/cleanup material i, gallons/month

VOC<sub>i</sub> = organic material content of coating/cleanup material i, pounds VOC/gal

CE = capture efficiency by weight (as determined from the most recent performance test)

DE = destruction efficiency by weight (as determined from the most recent performance test)

Evoc = VOC emissions in tons/month

U.S. EPA Method 24 and 24A in 40 CFR Part 60, Appendix A, shall be used to determine the VOC contents of the coatings as received from the manufacturer or supplier.

d. Emission Limitation:

Minimum VOC emission capture efficiency of 80%, by weight

Applicable Compliance Method:

Compliance shall be determined through performance testing using U.S. EPA Methods 204 through 204F from 40 CFR Part 51, Appendix M in accordance with OSC rule 3745-21-10(c). See f)(2) below.

e. Emission Limitation:

Minimum VOC emission destruction efficiency of 90%, by weight.

Applicable Compliance Method:

Performance testing using U.S. EPA Method 25 or 25A in accordance with OAC rule 3745-21-10 (C).

See f)(2) below.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the capture and control efficiency limitations for VOC. The emission testing shall also be conducted to establish the average temperature within the thermal oxidizer.

c. The following test methods shall be employed to demonstrate compliance with the overall emission control efficiency limitation for VOC:



- i. U.S. EPA Method 25 in 40 CFR Part 60, Appendix A, shall be used to determine the VOC concentrations, if the VOC concentrations as carbon in the outlet are 50 ppm or greater; or
- ii. U.S. EPA Method 25A in 40 CFR Part 60, Appendix A, shall be used to determine the VOC concentrations, if the VOC concentrations as carbon in the outlet are less than 50 ppm.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland Division of Air Quality (Cleveland DAQ).
- e. The emission capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The emission control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 (C). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Cleveland DAQ's refusal to accept the results of the emission tests.
- h. Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 13-04751  
**Facility ID:** 1318226136  
**Effective Date:** 8/8/2008

- i. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.
  
- g) Miscellaneous Requirements
  - (1) None.