OhioEPA
State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

**TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL**
**CUYAHOGA COUNTY**
**Application No: 13-3562**

**CERTIFIED MAIL**

| | |
|---|---|
| X | TOXIC REVIEW |
| | PSD |
| X | SYNTHETIC MINOR |
| | CEMS |
| | MACT |
| | NSPS |
| | NESHAPS |
| | NETTING |
| | MAJOR NON-ATTAINMENT |
| X | MODELING SUBMITTED |
| | GASOLINE DISPENSING FACILITY |

**DATE: November 17, 1999**

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

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, buy 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

**cc: USEPA**
**CLEVELAND DIVISION OF THE ENVIRONMENT**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install** **Issue Date: November 17, 1999**
**Terms and Conditions** **Effective Date: November 17, 1999**

**FINAL PERMIT TO INSTALL 13-3562**

| | |
|---|---|
| Application Number: | 13-3562 |
| APS Premise Number: | 1318226136 |
| Permit Fee: | **$800** |
| Name of Facility: | Automated Packaging Systems |
| Person to Contact: | Paul Banfield |
| Address: | 13555 McCracken Road |
| | Garfield Heights, OH 44125 |

Location of proposed air contaminant source(s) [emissions unit(s)]:
**13555 McCracken Road**
**Garfield Heights**, **Ohio**

Description of proposed emissions unit(s):
**SIX COLOR FLEXOGRAPHIC PRINTING PRESS WITH A CATALYTIC INCINERATOR TO CONTROL VOC EMISSIONS.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping 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:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. 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:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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.

iv. 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.

**2. 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 appropriate Ohio EPA District Office or local air agency 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).

**3. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

**4. 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.

**5. Severability Clause**

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.

**6. 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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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.

**7. 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 this Permit To Install.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

a. 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.

b. 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:

i. 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.

ii. 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.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. 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.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. 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.

**10. Permit To Operate Application**

a. If 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).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

## B. State Only Enforceable Permit To Install General Terms and Conditions

### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

### 2. Reporting Requirements Related to Monitoring and Recordkeeping 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 appropriate Ohio EPA District Office or local air agency.

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 appropriate Ohio EPA District Office or local air agency. 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., 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.)

### 3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

### 4. 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.

### 5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

**6. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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 prove to be inadequate or cannot meet applicable standards.

**7. 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.

**8. 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).

**9. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**10. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the

facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

| Pollutant | Tons Per Year |
|---|---|
| VOC | 28.8 |
| Facility wide Single HAP | 9.9 |
| Facility wide Combined HAP | 24.0 |

## Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** 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 |
|---|---|
| OAC 3734-31-05(D) | 9.9 tons of any single hazardous air pollutant as a rolling 12-month summation for the entire facility (Synthetic minor to avoid Maximum Achievable Control Technology requirements). |
| OAC 3734-31-05(D) | 24.0 tons of combined hazardous air pollutants as a rolling 12-month summation for the entire facility (Synthetic minor to avoid Maximum Achievable Control Technology requirements). |

### II. Operational Restrictions

1. The maximum annual production rate and emission limitations for the facility shall not exceed those specified by the formulas listed below, based on a rolling 12-month summation.

$$\sum_{i=1}^{x} \text{VOL X D X \%HAP X (1 ton/2000 pounds) X (1 - CE X DE)} = \text{Ehap}$$

Where:
VOL = coating and cleanup material usage, gallons/month
D = Density of the material, pounds/gal
%HAP = % by weight of the single or total HAP in the material
CE = capture efficiency by weight
DE = destruction efficiency by weight
Ehap = HAP emissions in tons/month

The permittee shall document the monthly emissions 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 the facility.

The maximum annual emission rates 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 emission levels specified in the following table:

| Month | Maximum Allowable Cumulative Emissions of: | |
|---|---|---|
| | Single HAP (Tons) | Combined HAP's (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 |

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

Single HAP Emissions

| Current month | | Previous 11 months | Total 12-month |
|---|---|---|---|
| Tons of single HAP | + | tons of single HAP | < = 9.9 tons of single HAP |

Combined HAP's Emissions

| Current month | | Previous 11 months | Total 12-month |
|---|---|---|---|
| Tons of combined HAP's | + | tons of combined HAP's | < = 24.0 tons of combined HAP's |

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The production and emissions rate for each month.

   b. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the production and emissions rates.

   Also, during the first 12 calendar months of operation, the permittee shall record the cumulative production and emissions rates for each calendar month.

2. The permittee shall keep and maintain monthly records of single HAP emissions and combined HAP's emissions on a rolling 12-month basis after the first 12 calendar months of operation following the issuance of this permit:

| Single HAP Emissions | | | | |
|---|---|---|---|---|
| Current month Tons of single HAP | + | Previous 11 months tons of single HAP | = | Total 12-month tons of single HAP |

| Combined HAP's Emissions | | | | |
|---|---|---|---|---|
| Current month Tons of combined HAP's | + | Previous 11 months tons of combined HAP's | = | Total 12-month tons of combined HAP's |

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.

## IV. Reporting Requirements

The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate and emission limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative production and emission levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

## IV. Testing Requirements

See Special Terms and Conditions in Part II, Sections A.II and A.III.

## B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

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

| Operations, Property and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| K014 Installation of a 6 color flexographic printing press No. 9 to replace W&H Olympia Press #9. | OAC rule 3745-21-09 (Y) | An emission capture efficiency which is at least sixty-five per cent (65%) by weight and an emission control efficiency which is at least ninety per cent (90%) by weight.<br>Less stringent than or equivalent to OAC rule 3745-31-05 (A)(3). (See emission capture efficiency and emission control efficiency requirements in Part III, Section B.I.1.) |
| | OAC 3745-31-05 (D) | 28.8 tons per year VOC, as a rolling 12-month summation (Synthetic minor to avoid Prevention of Significant Deterioration). |

**2. Additional Terms and Conditions**

**2.a** Maintain and operate a catalytic incinerator as follows:

The permittee shall employ a capture system which shall capture not less than 65%, by weight, of all VOC emissions from this emissions unit.

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

### II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

3. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80% of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

4. The maximum annual production rate and emission limitations for this emissions unit shall not exceed those specified by the formulas listed below, based upon a rolling 12-month summation.

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

where:
VOL = coating and cleanup material usage, gallons/month
VOC = organic material content, pounds VOC/gallon of coating and/or cleanup material
CE = capture efficiency by weight
DE = destruction efficiency by weight
Evoc = VOC emissions in tons/month

The permittee shall document the monthly emissions by tracking the monthly coating and cleanup material usage with the VOC content, emission capture efficiency by weight and emission control efficiency by weight, to calculate total monthly actual VOC emissions generated by emissions unit K014.

The maximum annual emission rates for this emissions unit shall not exceed 28.8 tons VOC per year, specified by the formulas listed below, based upon a rolling, 12-month summation of the emission rates.

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

| Month | Maximum Allowable Cumulative Emissions of VOC, (Tons) |
|---|---|
| 1 | 2.4 |
| 1-2 | 4.8 |
| 1-3 | 7.2 |
| 1-4 | 9.6 |
| 1-5 | 12.0 |
| 1-6 | 14.4 |
| 1-7 | 16.8 |
| 1-8 | 19.2 |

| | |
|---|---|
| 1-9 | 21.6 |
| 1-10 | 24.0 |
| 1-11 | 26.4 |
| 1-12 | 28.8 |

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

| Current month Tons of VOC emissions | + | Previous 11 months tons of VOC emissions | Total 12-month < = 28.8 tons of VOC emissions |
|---|---|---|---|

## III. 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 emissions unit.

2. The permittee shall operate and maintain continuous temperature monitors and a recorder which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed 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 parameter. The temperature monitors 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 shall collect and record the following information each day for the control equipment when this emissions unit is in operation:

   a A log of downtime time for the capture system, control device, monitoring equipment, and the associated emissions unit.

   b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature of the exhaust gases during the most recent performance test that demonstrated the emissions unit was in compliance.

   c. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

4. The permittee shall collect and record the following information for each month the emissions unit is in operation:

   a. The operating hours for each month.

   b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling 12-month summation of the operating hours.

   c. Also during the first 12 calendar month of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

5. The permittee shall collect and record the following information for each month the emissions unit is in operation:

   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 number of each cleanup material employed;

   e. The VOC content of each cleanup material, in pounds per gallon;

   f. The number of gallons of each cleanup material employed;

   g. The total uncontrolled VOC emissions from all coatings and cleanup materials employed, in pounds per month;

   h. The number of hours the emissions unit was in operation in a month (average);

   i. The uncontrolled VOC emission rates for all coatings and cleanup materials in pounds per hour (average); and

   j. The actual controlled VOC emission rates for all coatings and cleanup materials in pounds per hour (average).

   These records, as well as any supporting coating and cleanup material 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.

6. The permittee shall maintain monthly records of the following information:

   a. The production rate and emission limitations for each month.

b. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the production rate and emission limitations.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative production rate and emission limitations for each calendar month.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports 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 written quarterly deviation (excursion) reports of any daily record showing down time of the capture (collection) system, control device, monitoring equipment of the associated emissions unit. If no such instances have occurred during a particular quarter, a written quarterly report stating this shall be submitted.

3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.

   The permittee shall submit written quarterly deviation (excursion) reports to the appropriate Ohio EPA District Office or local air agency that identify each month during which the controlled emissions of VOC exceeded the limit in Part III, Special Terms and Conditions for Specific Emissions Unit(s), Sections A.II and A.III, for this emissions unit.

   These written quarterly reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31, April 30, July 31 and October 31 and shall cover the records of the previous calendar quarter.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate and emission limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative production and emissions levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

## V. Testing Requirements

1. Emission Limitation:

   28.8 TPY VOC
   Applicable Compliance Method:

   Calculation of the monthly and rolling 12-month emissions using records of amount of coatings used

and cleanup materials employed.

See Part III, Special Terms and Conditions for Specific Emissions Unit(s), Sections A.II and A.III for VOC emission calculations.

2. 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.

3. Emission Limitation:

Minimum VOC emission capture efficiency of 80%, by weight and minimum VOC emission destruction efficiency of 90%, by weight.

Applicable Compliance Method:

Performance testing in accordance with OAC rule 3745-21-10 (C).

4. Emission Testing Requirements

a. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

The emission testing shall be conducted 12 months after the issuance of this permit.

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

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 ~~than~~ 50 ppm or greater; or

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; and

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

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.)

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.

5. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

   Personnel from the appropriate Ohio EPA District Office or local air agency 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.

   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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

## VI. Miscellaneous Requirements

None.

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| K014 Installation of a 6 color flexographic printing press No. 9 to replace W&H Olympia Press #9. | OAC rule 3745-31-05 (A)(3) | An emission capture efficiency which is at least eighty per cent (80%) by weight and an emission control efficiency which is at least ninety per cent (90%) by weight.<br><br>31.85 pounds VOC per hour and 28.8 tons VOC per year<br><br>Compliance with air toxic policy |

**2. Additional Terms and Conditions**

**2.a** Maintain and operate a catalytic incinerator as follows:

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

The permittee also shall employ a control system which shall destroy at least 90%, by weight, of the VOC emissions captured.

## II. Operational Restrictions

1. See Part III, Special Terms and Conditions for Specific Emissions Unit(s), Section A.II, Operational Restrictions.

## III. Monitoring and/or Recordkeeping Requirements

1. See Part III, Special Terms and Conditions for Specific Emissions Unit(s), Section A.III, Monitoring and/or Recordkeeping Requirements

2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

   a. Background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and

   b. A copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

## IV. Reporting Requirements

1. See Part III, Special Terms and Conditions for Specific Emissions Unit(s), Section A.IV, Reporting Requirements.

## V. Testing Requirements and Compliance Method Determinations

1. Emission testing shall be conducted within 12 months after the issuance of this permit.

2. The emission testing shall be conducted to demonstrate compliance with the 80%, by weight, emission capture efficiency and 90%, by weight, emission control efficiency requirements.

   Compliance shall be demonstrated pursuant to Part III, Special Terms and Conditions for Specific Emissions Unit(s), Section A.V, Testing Requirements.

3. Emission Limitation:

   31.85 pounds VOC per hour

   The following test methods shall be employed to demonstrate compliance with the following limits:

   Testing shall be conducted while this emissions unit is venting VOC, toluene and/or methanol emissions to the catalytic incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio Environmental Protection Agency, Central Office.

Applicable Compliance Methods:

The permittee shall use the results of the emission control efficiency tests required pursuant to Part III, Special Terms and Conditions for Specific Emissions Unit(s), Section A.V of these terms and conditions to demonstrate compliance with the above limitation.

## VI. Miscellaneous Requirements

Air Toxic Emissions Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

   Pollutant: Propylene glycol mono methyl ether (PGME)

   TLV micrograms per cubic meter (ug/m^3): 369,000

   Maximum Hourly Emission Rate (pounds/hr): 31.85

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 8,505

   MAGLC (ug/m^3): 8,784

   CTO #4 Stack 2.14 feet diameter, 26 feet above ground, 2,000 ACFM, 100 deg. F.

2. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a “modification” as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a “modification”:

   a. changes in the composition of the materials used (typically for coatings and/or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an “allowable” emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

3. The Ohio EPA will not consider any of the above-mentioned as a “modification” requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a “modification” under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

4. For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.