



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
LORAIN COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.  
Center

**Application No: 02-16062**

**DATE: 3/7/2002**

Quebecor World - Oberlin Division  
Arthur Balika  
235 Artino Street  
Oberlin, OH 44074

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, 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 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  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

NEDO



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 02-16062**

Application Number: 02-16062  
APS Premise Number: 0247100591  
Permit Fee: **\$200**  
Name of Facility: Quebecor World - Oberlin Division  
Person to Contact: Arthur Balika  
Address: 235 Artino Street  
Oberlin, OH 44074

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**235 Artino Street**  
**Oberlin, Ohio**

Description of proposed emissions unit(s):  
**Six Unit Harris M110C Heatset Web Offset Printing Press.**

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 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 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.10 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 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.

## **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.

#### **11. 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.

#### **12. 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.

## **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. 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.

## **5. 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

## **6. 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.

## **7. 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).

## **8. 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.

**9. 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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	17.0 tpy

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

None

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
R007 - Heatset web offset lithographic printing line equipped with an ink setting oven and a thermal oxidizer	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11
		OAC rule 3745-21-07(G)(2)
		OAC rule 3745-21-07(G)(6)

OAC rule 3745-17-07(A)(1)

Applicable Emissions  
Limitations/Control  
Measures

Organic compound emissions shall not exceed 2.7 lbs/hr from the stack associated with this emissions unit.

Organic compound emissions shall not exceed 8.0 TPY from the stack associated with this emissions unit.

Fugitive organic compound emissions shall not exceed 9.0 TPY.

Particulate emissions shall not exceed 2.4 TPY.

Visible particulate emissions from the stack associated with this emissions unit shall not exceed five percent opacity as a six-minute average.

Emissions of organic compounds vented to the thermal oxidizer shall be reduced by at least ninety percent (90%), by weight.

The emission limitation specified by this rule is less stringent than the emission limitation established

pursuant to OAC rule 3745-31-05(A)(3).

Particulate emissions shall not exceed 0.551 lb/hr. See A.I.2.b below.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.a below.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

**2.a** OAC rule 3745-21-07(G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% reduction in OC emissions. The thermal oxidizer is employed to comply with the requirement to achieve an 85% reduction in OC emissions instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day. The emission limitation established pursuant to OAC rule 3745-31-05(A)(3) requires a 90% reduction in OC emissions which is more stringent than the emission limitation specified by OAC rule 3745-21-07(G)(2).

**2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour according to Engineering Guide #56. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit in accordance with Engineering Guide #56 is 63.6 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.551 pound per hour.

## **II. Operational Restrictions**

1. The average combustion temperature within the thermal incinerator, 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 compliance emission test required in Section A.V.1 of these terms and conditions or below 1200 degrees Fahrenheit until such testing has been completed.
2. The permittee shall maintain the press dryer with a negative pressure when the emissions unit is in operation.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for this emissions unit for the purpose of determining annual organic compound emissions:
  - a. the name and identification number of each ink, fountain solution, blanket wash, and adhesive employed;
  - b. the amount, in pounds, of each ink, fountain solution, blanket wash, and adhesive employed;

**Issued**Emissions Unit ID: **R007**

- c. the OC content of each ink, fountain solution, blanket wash, and adhesive employed, in percent by weight, as applied;
  - d. the total controlled OC emission rate for all inks, fountain solutions, and blanket washes; in pounds or ton(s), calculated using the destruction efficiency determined from the most recent performance test that demonstrated the emissions unit was in compliance and the formula contained in Section V.2.a of these terms and conditions; and
  - e. the total fugitive OC emission rate for all fountain solutions, blanket washes, and adhesives; in pounds or ton(s), calculated using the formula contained in Section V.2.c of these terms and conditions.
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation.
  3. The permittee shall collect and record the following information for each day:
    - a. all 3-hour blocks of time during which the average combustion temperature with 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 the emissions unit was in compliance; and
    - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
  4. The permittee shall monitor and record the negative pressure into the press dryer on a daily basis when the emissions unit is in operation. Dryer pressure shall be demonstrated by means of a differential pressure gauge, smoke tube(s), plastic flow indicator strips, or other flow indicating devices approved by the Ohio EPA Northeast District Office. Pressure monitoring shall be conducted to demonstrate that air flows into the press dryer at all openings in the dryer (excluding the exhaust stack). If a differential pressure gauge is used to monitor dryer pressure, the gauge reading shall be recorded. If a smoke tube(s) or plastic flow indicator strips are used to monitor dryer pressure, the permittee shall record whether or not the pressure in the press dryer is negative.

**IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify 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 the emissions unit was in compliance. Each report shall be submitted within 30 days after the deviation occurs.

**Issued**Emissions Unit ID: **R007**

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system (including failure to demonstrate negative pressure within the press dryer), control device, and monitoring equipment, when the associated emissions unit was in operation. These summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
3. The permittee shall submit annual reports which specify the actual annual OC emissions for this emissions unit. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

**V. Testing Requirements**

1. 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 6 months of the effective date of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for OC emissions and the allowable hourly OC mass rate of emissions.
  - c. Method 25 or 25A of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate and the destruction efficiency.
  - d. The emission tests shall be conducted while the emissions unit is operating at or near its maximum operating capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
  - e. The destruction 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 and U.S. EPA Methods 25 or 25A of 40 CFR Part 60, Appendix A. Formulation data from the manufacturer, or if required Method 24A, shall be used to determine OC contents of the inks, fountain solutions, and blanket washes. 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; and
  - f. In accordance with Engineering Guide #56, the results of the performance test shall be converted to pounds of OC per hour by multiplying the reported pounds of organic carbon per hour (from Method 25 or 25A) by a ratio of 1.2 pounds of organic material per pound of carbon.

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

Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), 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 test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

2. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

Organic compound emissions shall not exceed 2.7 lbs/hr from the stack associated with this emissions unit.

Applicable Compliance Method:

Initial compliance shall be determined in accordance with Section A.V.1 of these terms and conditions. Thereafter, compliance shall be demonstrated by the following equation:

$$S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$$

Where:

S = stack emissions, equation obtained from Engineering Guide #56;

DRE = destruction efficiency of the thermal incinerator, expressed as a decimal or percent, which was determined during the most recent performance test which demonstrated compliance with the pound per hour emission limitation from the stack (a 90% destruction efficiency shall be used until testing has been completed);

Emissions Unit ID: **R007**

0.8 = 20% of VOC's in heatset inks retained by substrate, 80% emitted per Engineering Guide #56;

$P = (\text{ink usage rate, lbs/hr}) \times (\text{ink VOC content, \% by wt.})$ ;

$A_d = \text{mass fraction of fountain solution VOC routed to dryer and control device} = 0.7$  for alcohol substitutes;

$FS = (\text{fountain solution usage rate, lbs/hr}) \times (\text{fountain solution VOC content, \% by wt.})$ ;

$B_d = \text{mass fraction of cleanup solvent routed to dryer and control device} = 0.4$  for automatic blanket wash; and

$BW = (\text{blanket wash usage rate, lbs/hr}) \times (\text{blanket wash VOC content, \% by wt.})$ .

b. Emission Limitation:

Organic compound emissions shall not exceed 8.0 TPY from the stack associated with this emissions unit.

Applicable Compliance Method:

The annual stack emission limitation was established by multiplying the pound per hour OC stack emission limitation by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, a demonstration of compliance with the hourly stack emission limitation shall also be a demonstration of compliance with the annual stack emission limitation.

c. Emission Limitation:

Fugitive organic compound emissions shall not exceed 9.0 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping specified in Section A.III.1 of these terms and conditions and the following equation:

$$F = [A_f(FS) + B_f(BW) + AD] \times 1 \text{ ton}/2000 \text{ lbs}$$

Where:

F = annual fugitive emissions from emissions unit R007, equation obtained from Engineering Guide #56 with the addition of adhesive emissions which are all fugitive according to the facility's permit application;

$A_f$  = mass fraction of fountain solution VOC emitted as fugitive = 0.3 for alcohol substitutes;

$FS$  = (fountain solution usage rate, lbs/yr) x (fountain solution VOC content, % by wt.);

$B_f$  = mass fraction of cleanup solvent emitted as fugitive = 0.6 for automatic blanket wash;

$BW$  = (blanket wash usage rate, lbs/yr) x (blanket wash VOC content, % by wt.); and

$AD$  = (adhesive usage rate, lbs/yr) x (adhesive VOC content, % by wt.).

d. Emission Limitation:

Particulate emissions shall not exceed 2.4 TPY.

Applicable Compliance Method:

The annual particulate emission limitation was established by multiplying the pound per hour particulate emission limitation by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, a demonstration of compliance with the hourly particulate emission limitation shall also be a demonstration of compliance with the annual particulate emission limitation.

e. Emission Limitation:

Visible particulate emissions from the stack associated with this emissions unit shall not exceed five percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

f. Emission Limitation:

Emissions of organic compounds vented to the thermal oxidizer shall be reduced by at least ninety percent (90%), by weight.

Applicable Compliance Method:

Compliance shall be determined through stack testing specified in Section A.V.1 of these terms and conditions.

g. Emission Limitation:

Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. Per the Ohio EPA Engineering Guide #56, no particulate testing should be necessary since this emissions unit is controlled by a thermal oxidizer.

3. Formulation data or US EPA Method 24 shall be used to determine the VOC contents of all the inks, fountain solutions, blanket washes, and adhesives employed in this emissions unit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R007 - Heatset web offset lithographic printing line	None	None.

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit (R007) was evaluated based on the actual materials employed and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant potentially emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethylene glycol N-butyl ether (point)  
 TLV (ug/m3): 240,000  
 Maximum Hourly Emission Rate (g/s): 0.004  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.3  
 MAGLC (ug/m3): 5714

Pollutant: ethylene glycol N-butyl ether (fugitive)  
 TLV (ug/m3): 240,000  
 Maximum Hourly Emission Rate (g/s): 0.038

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 73  
MAGLC (ug/m3): 5714

Pollutant: ethylene glycol (point)  
TLV (ug/m3): 240,000  
Maximum Hourly Emission Rate (g/s): 0.009  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.6  
MAGLC (ug/m3): 5714

Pollutant: ethylene glycol N-butyl ether (fugitive)  
TLV (ug/m3): 240,000  
Maximum Hourly Emission Rate (g/s): 0.076  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 147  
MAGLC (ug/m3): 5714

Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically coatings 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
2. If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition

**Issued**Emissions Unit ID: **R007**

(other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, 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**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None