



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL
HURON COUNTY**

Street Address:

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

Mailing Address:

Lazarus Gov. Center

Application No: 03-13427

DATE: 6/1/00

R R Donnelley & Sons Company
Christopher Hassmann
1145 Conwell Ave
Willard, OH 44888-0002

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA

NWDO

Michigan



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: To be entered upon final issuance

DRAFT PERMIT TO INSTALL 03-13427

Application Number: 03-13427
APS Premise Number: 0339030135
Permit Fee: **To be entered upon final issuance**
Name of Facility: R R Donnelley & Sons Company
Person to Contact: Christopher Hassmann
Address: 1145 Conwell Ave
Willard, OH 448880002

Location of proposed air contaminant source(s) [emissions unit(s)]:

**1145 Conwell Ave
Willard, Ohio**

Description of proposed emissions unit(s):

book printing.

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

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.11 below if no deviations occurred during the quarter.

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- 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.

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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:

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- 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.

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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

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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**

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic compounds (OC)	23.1

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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>	<u>Applicable Emissions Limitations/Control Measures</u>
K022 - heatset web offset lithographic printing press (#352)	OAC rule 3745-31-05(A)	see A.I.2.c <u>controlled organic compound (OC) emissions</u> - 0.94 pound OC/hour, 4.12 tons OC/year, including cleanup materials <u>uncontrolled OC emissions</u> - 16.12 tons OC/year, including cleanup materials
	OAC rule 3745-31-05(D)	<u>total allowable OC emissions rate (combined with K023)</u> - 23.1 tons OC/rolling 12-month period (see A.I.2.b)
	OAC rule 3745-21-07(G)	see section A.II.7
	OAC rule 3745-17-11(B)	None (see section A.I.2.d)
	OAC rule 3745-17-07(A)	None (see section A.I.2.e)

2. Additional Terms and Conditions

- 2.a The controlled OC emission rates of 0.94 pound/hour and 4.12 tons/year and the uncontrolled OC emission rate of 16.12 tons/year represent the potential to emit for emission unit K022 based on the following physical limitations:

- i. the percentage of the ink solvent retained on the web after the dryer is 20 percent*;
- ii. the percentage of the fountain solution solvent available for capture in the dryer is

70 percent*;

- iii. the percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,
- iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

2.b The permittee has requested a federally enforceable limitation of 23.1 tons OC/rolling 12-month period for emissions units K022 and K023 combined based on OC content, gallon usage restrictions and OC control requirements (see A.II.1, A.II.2, A.II.3, A.II.4 and A.I.2.c) for the purpose of avoiding PSD applicability.

2.c The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system meeting the following requirements for control of OC emissions:

- i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent; and,
- ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent.

2.d The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

2.e This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall comply with the following OC content restrictions for the materials employed

in this emissions unit:

- a. ink: 0.45 pound OC/pound of ink, as applied;
 - b. fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and,
 - c. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.
2. The maximum annual ink usage rate for emissions units K022 and K023 combined shall not exceed 210,750.0 pounds, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Ink Usage Rates</u>
1	35125.0 pounds
1-2	70250.0 pounds
1-3	105375.0 pounds
1-4	140500.0 pounds
1-5	175625.0 pounds
1-6	210750.0 pounds
1-7	210750.0 pounds
1-8	210750.0 pounds
1-9	210750.0 pounds
1-10	210750.0 pounds
1-11	210750.0 pounds
1-12	210750.0 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual ink usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

3. The maximum annual fountain solution usage rate for emissions units K022 and K023 combined shall not exceed 5000.0 gallons, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Fountain Solution Usage Rates</u>
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1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons
1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual fountain solution usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

4. The maximum annual auto blanket wash usage rate for emissions units K022 and K023 combined shall not exceed 5,000.0 gallons, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Auto Blanket Wash Usage Rates</u>
1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons
1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance

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with the annual auto blanket wash usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

- 5. The maximum annual hand blanket wash usage rate for emissions units K022 and K023 combined shall not exceed 5,000.0 gallons, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Hand Blanket Wash Usage Rates</u>
1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons
1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual hand blanket wash usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

- 6. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1300 degrees Fahrenheit.
- 7. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record keeping Requirements

- 1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions units K022 and K023 combined:

- a. the name and identification number of each graphic arts material employed;
 - b. documentation on whether or not each material employed is a photochemically reactive material;
 - c. the quantity of each graphic arts material employed, in gallons (in pounds for inks);
 - d. the OC content of each graphic arts material, in pounds/gallon (in pounds/pound for inks), as applied;
 - e. the OC emissions (A.III.1.c x A.III.1.d, taking into account the information in sections A.I.2.a and A.I.2.c) for each graphic arts material employed, in pounds/month;
 - f. the total OC emission rate of all graphic arts materials employed (summation of e for all graphic arts materials), in tons/month;
 - g. for the first 12 months of operation following the issuance of this permit, the permittee shall also record the following information for emissions units K022 and K023 combined:
 - i. the cumulative total monthly OC emission rate, in tons.
 - ii. the cumulative gallon input rate for each graphics arts material; and,
 - h. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month total OC emission rate of all graphics arts materials employed (summation of A.III.1.f for each month).
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 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.

The permittee shall collect and record the following information each day for this emissions unit:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1300 degrees Fahrenheit; and,
- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

R R D**PTI A**Emissions Unit ID: **K022****Issued: To be entered upon final issuance****IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable gallon input rates;
 - b. the annual gallon usage restrictions and emission limitation from emissions units K022 and K023 combined per rolling 12 month period; and,
 - c. the OC content restrictions.
2. 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 does not comply with the temperature limitation specified in section A.II.2 of this permit.
3. The permittee shall submit deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
0.94 pound OC/hour, 4.12 tons OC/year - controlled (K022)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly emission limitation through the stack testing required in sections A.V.2 and A.V.3 of this permit.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.
 - b. Emission Limitation:
16.12 tons OC/year - uncontrolled (K022)

Applicable Compliance Method:

Emissions Unit ID: **K022**

The permittee shall determine compliance by the summation of the following:

- i. fountain solution - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent not available for capture (30 percent) by the control system;
 - ii. auto blanket wash - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent not available for capture (60 percent) by the control system; and,
 - iii. hand blanket wash - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent retained on the cloths (75 percent).
- c. Emission Limitation:
23.1 tons OC/rolling 12-month period, combined with K023

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the record keeping required in section A.III.1 of this permit.

2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. the emissions testing shall be conducted within 90 days of commencing operation pursuant to this permit;
 - b. the emission testing shall be conducted to demonstrate compliance with the destruction efficiency and the hourly emission rate for OC; and,
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. in accordance with Engineering Guide #56 (Question 19), the capture efficiency may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled provided that the press dryer maintains a negative pressure within the pressroom and the dryer exhausts to a control device (such as the thermal oxidizer). Therefore, during testing of the thermal oxidizer, the permittee shall

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verify that a negative pressure was maintained within the pressroom; and,

- ii. the destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the vapor control system. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

3. The test(s) 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.

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 test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

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Facility ID: 0339030135

Emissions Unit ID: K022

None

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Emissions Unit ID: **K022**

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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>
K022 - heatset web offset lithographic printing press (#352)	none	see sections B.II and B.III

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) 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 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

TLV (mg/m3): 127

Maximum Hourly Emission Rate (lbs/hr): 4.62*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.55

MAGLC (ug/m3): 3,024

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- * assume that all of the emissions are ethylene glycol

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification 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 still be still 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 for 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.).

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

III. Monitoring and/or Record keeping Requirements

1. 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

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Emissions Unit ID: K023

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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>	<u>Applicable Emissions Limitations/Control Measures</u>
K023 - heatset web offset lithographic printing press (#353)	OAC rule 3745-31-05(A)	see A.I.2.c <u>controlled organic compound (OC) emissions</u> - 0.94 pound OC/hour, 4.12 tons OC/year, including cleanup materials <u>uncontrolled OC emissions</u> - 16.12 tons OC/year, including cleanup materials
	OAC rule 3745-31-05(D)	<u>total allowable OC emissions rate (combined with K022)</u> - 23.1 tons OC/rolling 12-month period (see A.I.2.b)
	OAC rule 3745-21-07(G)	see section A.II.7
	OAC rule 3745-17-11(B)	None (see section A.I.2.d)
	OAC rule 3745-17-07(A)	None (see section A.I.2.e)

2. Additional Terms and Conditions

- 2.a The controlled OC emission rates of 0.94 pound/hour and 4.12 tons/year and the uncontrolled OC emission rate of 16.12 tons/year represent the potential to emit for emission unit K023 based on the following physical limitations:
 - i. the percentage of the ink solvent retained on the web after the dryer is 20

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Emissions Unit ID: K023

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percent*;

- ii. the percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;
- iii. the percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,
- iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

- 2.b** The permittee has requested a federally enforceable limitation of 23.1 tons OC/rolling 12-month period for emissions units K022 and K023 combined based on OC content, gallon usage restrictions and OC control requirements (see A.II.1, A.II.2, A.II.3, A.II.4 and A.I.2.c) for the purpose of avoiding PSD applicability.
- 2.c** The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system meeting the following requirements for control of OC emissions:
 - i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent; and,
 - ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent.
- 2.d** The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

- 2.e This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall comply with the following OC content restrictions for the materials employed in this emissions unit:
 - a. ink: 0.45 pound OC/pound of ink, as applied;
 - b. fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and,
 - c. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.
2. The maximum annual ink usage rate for emissions units K022 and K023 combined shall not exceed 210,750.0 pounds, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Ink Usage Rates</u>
1	35125.0 pounds
1-2	70250.0 pounds
1-3	105375.0 pounds
1-4	140500.0 pounds
1-5	175625.0 pounds
1-6	210750.0 pounds
1-7	210750.0 pounds
1-8	210750.0 pounds
1-9	210750.0 pounds
1-10	210750.0 pounds
1-11	210750.0 pounds
1-12	210750.0 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual ink usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

3. The maximum annual fountain solution usage rate for emissions units K022 and K023 combined shall not exceed 5000.0 gallons, based upon a rolling, 12-month summation of the monthly usage

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rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Fountain Solution Usage Rates</u>
1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons
1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual fountain solution usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

4. The maximum annual auto blanket wash usage rate for emissions units K022 and K023 combined shall not exceed 5,000.0 gallons, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Auto Blanket Wash Usage Rates</u>
1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons

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1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual auto blanket wash usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

5. The maximum annual hand blanket wash usage rate for emissions units K022 and K023 combined shall not exceed 5,000.0 gallons, based upon a rolling, 12-month summation of the monthly usage rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Hand Blanket Wash Usage Rates</u>
1	833.3 gallons
1-2	1666.6 gallons
1-3	2499.9 gallons
1-4	3333.2 gallons
1-5	4166.5 gallons
1-6	5000.0 gallons
1-7	5000.0 gallons
1-8	5000.0 gallons
1-9	5000.0 gallons
1-10	5000.0 gallons
1-11	5000.0 gallons
1-12	5000.0 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual hand blanket wash usage rate limitation shall be based upon a rolling, 12-month summation of the monthly usage rates.

6. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1300 degrees Fahrenheit.

Emissions Unit ID: K023

7. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions units K022 and K023 combined:
 - a. the name and identification number of each graphic arts material employed;
 - b. documentation on whether or not each material employed is a photochemically reactive material;
 - c. the quantity of each graphic arts material employed, in gallons (in pounds for inks);
 - d. the OC content of each graphic arts material, in pounds/gallon (in pounds/pound for inks), as applied;
 - e. the OC emissions (A.III.1.c x A.III.1.d, taking into account the information in sections A.I.2.a and A.I.2.c) for each graphic arts material employed, in pounds/month;
 - f. the total OC emission rate of all graphic arts materials employed (summation of e for all graphic arts materials), in tons;
 - g. for the first 12 months of operation following the issuance of this permit, the permittee shall also record the following information for emissions units K022 and K023 combined:
 - i. the cumulative total monthly OC emission rate, in tons.
 - ii. the cumulative gallon input rate for each graphics arts material; and,
 - h. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month total OC emission rate of all graphics arts materials employed (summation of A.III.1.f for each month).
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 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.

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The permittee shall collect and record the following information each day for this emissions unit:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1300 degrees Fahrenheit; and,
- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable gallon input rates;
 - b. the annual gallon usage restrictions and emission limitation from emissions units K022 and K023 combined per rolling 12 month period; and,
 - c. the OC content restrictions.
2. 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 does not comply with the temperature limitation specified in section A.II.2 of this permit.
3. The permittee shall submit deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
0.94 pound OC/hour, 4.12 tons OC/year - controlled (K023)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation through the stack testing required in sections A.V.2 and A.V.3 of this permit.

Emissions Unit ID: K023

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- b. Emission Limitation:
16.12 tons OC/year - uncontrolled (K023)

Applicable Compliance Method:

The permittee shall determine compliance by the summation of the following:

- i. fountain solution - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent not available for capture (30 percent) by the control system;
 - ii. auto blanket wash - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent not available for capture (60 percent) by the control system; and,
 - iii. hand blanket wash - multiply the hourly usage rate by the OC content, as applied then multiply this value by the percentage of solvent retained on the cloths (75 percent).
- c. Emission Limitation:
23.1 tons OC/rolling 12-month period, combined with K022

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the record keeping required in section A.III.1 of this permit.

2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. the emissions testing shall be conducted within 90 days of commencing operation pursuant to this permit;
 - b. the emission testing shall be conducted to demonstrate compliance with the destruction efficiency and the hourly emission rate for OC; and,
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. in accordance with Engineering Guide #56 (Question 19), the capture efficiency

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may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled provided that the press dryer maintains a negative pressure within the pressroom and the dryer exhausts to a control device (such as the thermal oxidizer). Therefore, during testing of the thermal oxidizer, the permittee shall verify that a negative pressure was maintained within the pressroom; and,

- ii. the destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the vapor control system. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
3. The test(s) 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.

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 test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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Emissions Unit ID: K023

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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

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Emissions Unit ID: K023

Issued: To be entered upon final issuance**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

- 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>
K023 - heatset web offset lithographic printing press (#353)	none	see sections B.II and B.III

2. Additional Terms and Conditions**2.a** None**II. Operational Restrictions**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) 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 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

TLV (mg/m³): 127

Maximum Hourly Emission Rate (lbs/hr): 4.62*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 23.55MAGLC (ug/m³): 3,024

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- * assume that all of the emissions are ethylene glycol

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification 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 still be still 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 for 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.).

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

III. Monitoring and/or Record keeping Requirements

- 1. 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

NEW SOURCE REVIEW FORM B

PTI Number: 03-13427 Facility ID: 0339030135

FACILITY NAME R R Donnelley & Sons Company

FACILITY DESCRIPTION book printing CITY/TWP Willard

SIC CODE 2732 SCC CODE 4-02-999-98 EMISSIONS UNIT ID K022

EMISSIONS UNIT DESCRIPTION heatset web offset lithographic printing press (#352)

DATE INSTALLED upon issuance of PTI

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	attainment	0.94 lb/hr controlled	4.12 controlled 16.12 uncontrolled 23.1 total combined with K023	0.94 lb/hr controlled	4.12 controlled 16.12 uncontrolled 23.1 total combined with K023
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Use of a thermal oxidizer and compliance with the terms and conditions of this permit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$not specified

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: ethylene glycol

NEW SOURCE REVIEW FORM B

PTI Number: 03-13427 Facility ID: 0339030135

FACILITY NAME R R Donnelley & Sons Company

FACILITY DESCRIPTION book printing CITY/TWP Willard

Emissions Unit ID: K023

SIC CODE 2732 SCC CODE 4-02-999-98 EMISSIONS UNIT ID K023

EMISSIONS UNIT DESCRIPTION heatset web offset lithographic printing press (#353)

DATE INSTALLED upon issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	attainment	0.94 lb/hr controlled	4.12 controlled 16.12 uncontrolled 23.1 total combined with K023	0.94 lb/hr controlled	4.12 controlled 16.12 uncontrolled 23.1 total combined with K023
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:
OFFSET POLICY?

NSPS? NESHAP? PSD?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Use of thermal oxidizer and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$not specified

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: ethylene glycol