☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**
Permit ~~To Install No. 03-0~~7171

A. Source Description

The permittee has installed 4 printing lines, emissions units K009, K010, K011 and K012, which are equipped with thermal oxidizers.

B. Facility Emissions and Attainment Status

The permittee is a major stationary source of organic compounds (OC) and is a Title V facility. Huron County is currently designated as attainment for VOC.

C. Source Emissions

Prior to the federally enforceable emission limitations and operational restrictions on emissions units K009, K010, K011 and K012, the potential OC emissions from this project would exceed PSD significance levels, thereby requiring a PSD review. The permittee voluntarily requested that a combined federally enforceable OC emission limitation of 143.1 tons/rolling, 12-month period be established in this permit.

D. Conclusion

With the establishment of a combined federally enforceable OC emission limitation of 143.1 tons/rolling, 12-month period, the potential to emit OC from this project (installation of emissions units K009, K010, K011 and K012) is less than the PSD significance level for OC.

State of Ohio Environmental Protection Agency

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

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Application No: 03-07171

DATE: 3/11/2003

R R Donnelley and Sons Co
Christopher Hassmann
1145 Conwell Ave
Willard, OH 448880001

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. 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 modification 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 modification may be issued in proposed of 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 modification a fee of **$ 0** 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,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **NWDO** **MI**

HURON COUNTY

PUBLIC NOTICE

ISSUANCE OF DRAFT PERMIT TO INSTALL **03-07171** FOR AN AIR CONTAMINANT SOURCE FOR
R R DONNELLEY AND SONS CO

On 3/11/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **R R Donnelley and Sons Co**, located at **1145 Conwell Ave, Willard**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 03-07171:

four heatset web offset printing lines with thermal oxidizer control.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install | **Issue Date: To be entered upon final issuance**
Terms and Conditions | **Effective Date: To be entered upon final issuance**

DRAFT MODIFICATION OF PERMIT TO INSTALL 03-07171

Application Number:	03-07171
APS Premise Number:	0339030135
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	R R Donnelley and Sons Co
Person to Contact:	Christopher Hassmann
Address:	1145 Conwell Ave Willard, OH 448880001

Location of proposed air contaminant source(s) [emissions unit(s)]:
1145 Conwell Ave
Willard, Ohio

Description of proposed emissions unit(s):
four heatset web offset printing lines with thermal oxidizer control.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 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 <u>obtained before</u> 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 ninety (90) 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

Pollutant	Tons Per Year
OC	143.1

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K009 - OSM Press 325 with Thermal Oxidizer No. 2	OAC rule 3745-31-05(A)(3)	See A.I.2.c
		15.3 pounds organic compounds (OC)/hour, as a monthly average, 67.0 tons OC/year from emissions unit K009 (see A.I.2.a)
	OAC rule 3745-31-05(D)	143.1 tons OC/rolling, 12-month period from K009, K010, K011 and K012, combined (see A.I.2.b)
	OAC rule 3745-21-07(G)	See A.II.1
	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 OC emission limitation of 15.3 pounds/hour (as a monthly average) and 67.0 tons/year for emissions unit K009 is based on the following information:

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 143.1 tons OC/rolling 12-month period for emissions units K009, K010, K011 and K012, combined, based on OC contents, usage restrictions and OC control requirements for all four units 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 of the press dryer exhaust; and,

ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent when operating at an average temperature of 1300 degrees Fahrenheit or greater.

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 not subject to 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 average 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 rolling 12-month usage rate of OC containing materials for emissions units K009, K010, K011 and K012 combined is limited by the following equation:

   Where,

   M = the increment of the rolling 12-month period; and,
   n = the increment of the OC containing material used during the period
   And where all other variables are the same as described in paragraph A.III.1.e below.

3. 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.

4. 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 Recordkeeping 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 unit K009:

   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 for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times (1-(C_n/100) \times (K/100))]$

Where:

E_n= OC emissions from an individual material (tons OC emitted/month);
U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);
V_n= Average OC content of material as determined by Method 24 (lb OC/lb material);
R_n= Amount of OC retained on the web or on cloths (tons OC retained/100 tons OC used):

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= Capture efficiency for individual material emitted (tons OC captured/100 tons OC into dryer):

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer).

f. the total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

Where:

E_M = Monthly OC emissions, in tons/month; and,
E_n = OC emissions from each individual graphic arts material (A.III.1.e).

g. the number of hours this emissions unit was in operation (e.g., when graphic arts materials were being applied or employed);

h. the average hourly OC emission rate [(A.III.1.f divided by A.III.1.g) divided by 2000];

i. the rolling, 12-month OC emission rate from emissions units K009, K010, K011 and K012, combined, calculated as follows:

$E_T = E_{M1} + E_{M2} + E_{M3} +... +E_{M12}$

Where:

E_T =Annual OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (tons/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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the emission limitation of 15.3 pounds OC/hour (as a monthly average);

b. the OC content restrictions; and,

c. the emission limitation of 143.1 tons OC/rolling, 12-month period from units K009, K010, K011 and K012, combined.

2. The permittee shall submit quarterly 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 quarterly deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

4. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:
   15.3 pounds OC/hour (as a monthly average) and 67.0 tons OC/year, from unit K009

   Applicable Compliance Method:
   The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K009 through the record keeping required in Section A.III.1 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:
   143.1 tons OC/rolling 12-month period from K009, K010, K011 and K012, combined

   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 in accordance with the schedule outlined in the facility's final Title V permit which was issued on December 31, 2001.

b. the emission testing shall be conducted to demonstrate compliance with the capture efficiency (see A.V.2.c.i) and destruction efficiency (see A.V.2.c.ii) 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 press dryer 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 press dryer; 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

1. None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K009 - OSM Press 325 with Thermal Oxidizer No. 2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K010 - OMW Press 326 with Thermal Oxidizer No. 2	OAC rule 3745-31-05(A)(3)	See A.I.2.c
		13.7 pounds organic compounds (OC)/hour, as a monthly average, 60.0 tons OC/year from emissions unit K010 (see A.I.2.a)
	OAC rule 3745-31-05(D)	143.1 tons OC/rolling, 12-month period from K009, K010, K011 and K012, combined (see A.I.2.b)
	OAC rule 3745-21-07(G)	See A.II.1
	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 OC emission limitation of 13.7 pounds/hour (as a monthly average) and 60.0 tons/year for emissions unit K010 is based on the following information:

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 143.1 tons OC/rolling 12-month period for emissions units K009, K010, K011 and K012, combined, based on OC contents, usage restrictions and OC control requirements for all four units 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 of the press dryer exhaust; and,

ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent when operating at an average temperature of 1300 degrees Fahrenheit or greater.

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 not subject to 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 average 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 rolling 12-month usage rate of OC containing materials for emissions units K009, K012, K011 and K012 combined is limited by the following equation:

Where,

M = the increment of the rolling 12-month period; and,
n = the increment of the OC containing material used during the period
And where all other variables are the same as described in paragraph A.III.1.e below.

3. 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.

4. 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 Recordkeeping 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 unit K010:

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 for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times (1-(C_n/100) \times (K/100))]$

Where:

E_n= OC emissions from an individual material (tons OC emitted/month);
U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);
V_n= Average OC content of material as determined by Method 24 (lb OC/lb material);
R_n= Amount of OC retained on the web or on cloths (tons OC retained/100 tons OC used):

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= Capture efficiency for individual material emitted (tons OC captured/100 tons OC into dryer):

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer).

f. the total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

Where:

E_M = Monthly OC emissions, in tons/month; and,
E_n = OC emissions from each individual graphic arts material (A.III.1.e).

g. the number of hours this emissions unit was in operation (e.g., when graphic arts materials were being applied or employed);

h. the average hourly OC emission rate [(A.III.1.f divided by A.III.1.g) divided by 2000];

i. the rolling, 12-month OC emission rate from emissions units K009, K010, K011 and K012, combined, calculated as follows:

$E_T = E_{M1} + E_{M2} + E_{M3} +... +E_{M12}$

Where:

E_T =Annual OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (tons/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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the emission limitation of 13.7 pounds OC/hour (as a monthly average);

b. the OC content restrictions; and,

c. the emission limitation of 143.1 tons OC/rolling, 12-month period from units K009, K010, K011 and K012, combined.

2. The permittee shall submit quarterly 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 quarterly deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

4. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:
   13.7 pounds OC/hour (as a monthly average) and 60.0 tons OC/year, from unit K010

   Applicable Compliance Method:
   The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K010 through the record keeping required in Section A.III.1 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:
   143.1 tons OC/rolling 12-month period from K009, K010, K011 and K012, combined

   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 in accordance with the schedule outlined in the facility's final Title V permit which was issued on December 31, 2001.

   b. the emission testing shall be conducted to demonstrate compliance with the capture efficiency (see A.V.2.c.i) and destruction efficiency (see A.V.2.c.ii) 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 press dryer 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 press dryer; 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

1. None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K010 - OMW Press 326 with Thermal Oxidizer No. 2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K011 - OSM Press 336 with Thermal Oxidizer No. 2	OAC rule 3745-31-05(A)(3)	See A.I.2.c
		14.2 pounds organic compounds (OC)/hour, as a monthly average, 62.2 tons OC/year from emissions unit K011 (see A.I.2.a)
	OAC rule 3745-31-05(D)	143.1 tons OC/rolling, 12-month period from K009, K010, K011 and K012, combined (see A.I.2.b)
	OAC rule 3745-21-07(G)	See A.II.1
	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 OC emission limitation of 14.2 pounds/hour (as a monthly average) and 62.2 tons/year for emissions unit K011 is based on the following information:

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 143.1 tons OC/rolling 12-month period for emissions units K009, K010, K011 and K012, combined, based on OC contents, usage restrictions and OC control requirements for all four units 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 of the press dryer exhaust; and,

ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent when operating at an average temperature of 1300 degrees Fahrenheit or greater.

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 not subject to 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 average 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 rolling 12-month usage rate of OC containing materials for emissions units K009, K010, K011 and K012 combined is limited by the following equation:

   Where,

   M = the increment of the rolling 12-month period; and,
   n = the increment of the OC containing material used during the period
   And where all other variables are the same as described in paragraph A.III.1.e below.

3. 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.

4. 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 Recordkeeping 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 unit K011:

   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 for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times (1-(C_n/100) \times (K/100))]$

Where:

E_n= OC emissions from an individual material (tons OC emitted/month);
U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);
V_n= Average OC content of material as determined by Method 24 (lb OC/lb material);
R_n= Amount of OC retained on the web or on cloths (tons OC retained/100 tons OC used):

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= Capture efficiency for individual material emitted (tons OC captured/100 tons OC into dryer):

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer).

f. the total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

Where:

E_M = Monthly OC emissions, in tons/month; and,
E_n = OC emissions from each individual graphic arts material (A.III.1.e).

g. the number of hours this emissions unit was in operation (e.g., when graphic arts materials were being applied or employed);

h. the average hourly OC emission rate [(A.III.1.f divided by A.III.1.g) divided by 2000];

i. the rolling, 12-month OC emission rate from emissions units K009, K010, K011 and K012, combined, calculated as follows:

$E_T = E_{M1} + E_{M2} + E_{M3} +... +E_{M12}$

Where:

E_T =Annual OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (tons/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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the emission limitation of 14.2 pounds OC/hour (as a monthly average);

b. the OC content restrictions; and,

c. the emission limitation of 143.1 tons OC/rolling, 12-month period from units K009, K010, K011 and K012, combined.

2. The permittee shall submit quarterly 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 quarterly deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

4. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:
   14.2 pounds OC/hour (as a monthly average) and 62.2 tons OC/year, from unit K011

   Applicable Compliance Method:
   The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K011 through the record keeping required in Section A.III.1 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:
   143.1 tons OC/rolling 12-month period from K009, K010, K011 and K012, combined

   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 in accordance with the schedule outlined in the facility's final Title V permit which was issued on December 31, 2001.

b. the emission testing shall be conducted to demonstrate compliance with the capture efficiency (see A.V.2.c.i) and destruction efficiency (see A.V.2.c.ii) 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 press dryer 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 press dryer; 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

1. None

Emissions Unit ID: K011

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K011 - OSM Press 336 with Thermal Oxidizer No. 2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K012 - OSM Press 380 with Thermal Oxidizer No. 3	OAC rule 3745-31-05(A)(3)	See A.I.2.c
		14.1 pounds organic compounds (OC)/hour, as a monthly average, 61.8 tons OC/year from emissions unit K012 (see A.I.2.a)
	OAC rule 3745-31-05(D)	143.1 tons OC/rolling, 12-month period from K009, K010, K011 and K012, combined (see A.I.2.b)
	OAC rule 3745-21-07(G)	See A.II.1
	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 OC emission limitation of 14.1 pounds/hour (as a monthly average) and 61.8 tons/year for emissions unit K012 is based on the following information:

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 143.1 tons OC/rolling 12-month period for emissions units K009, K010, K011 and K012, combined, based on OC contents, usage restrictions and OC control requirements for all four units 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 of the press dryer exhaust; and,

ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 90 percent when operating at an average temperature of 1300 degrees Fahrenheit or greater.

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 not subject to 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 average 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 rolling 12-month usage rate of OC containing materials for emissions units K009, K010, K011 and K012 combined is limited by the following equation:

Where,

M = the increment of the rolling 12-month period; and,
n = the increment of the OC containing material used during the period
And where all other variables are the same as described in paragraph A.III.1.e below.

3. 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.

4. 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 Recordkeeping 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 unit K012:

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 for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times (1-(C_n/100) \times (K/100))]$

Where:

E_n= OC emissions from an individual material (tons OC emitted/month);
U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);
V_n= Average OC content of material as determined by Method 24 (lb OC/lb material);
R_n= Amount of OC retained on the web or on cloths (tons OC retained/100 tons OC used):

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= Capture efficiency for individual material emitted (tons OC captured/100 tons OC into dryer):

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer).

f. the total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

Where:

E_M = Monthly OC emissions, in tons/month; and,
E_n = OC emissions from each individual graphic arts material (A.III.1.e).

g. the number of hours this emissions unit was in operation (e.g., when graphic arts materials were being applied or employed);

h. the average hourly OC emission rate [(A.III.1.f divided by A.III.1.g) divided by 2000];

i. the rolling, 12-month OC emission rate from emissions units K009, K010, K011 and K012, combined, calculated as follows:

$E_T = E_{M1} + E_{M2} + E_{M3} +... +E_{M12}$

Where:

E_T =Annual OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (tons/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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the emission limitation of 14.1 pounds OC/hour (as a monthly average);

b. the OC content restrictions; and,

c. the emission limitation of 143.1 tons OC/rolling, 12-month period from units K009, K010, K011 and K012, combined.

2. The permittee shall submit quarterly 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 quarterly deviation (excursion) reports which identify each day during which a photochemically reactive material was employed.

4. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:
   14.1 pounds OC/hour (as a monthly average) and 61.8 tons OC/year, from unit K012

   Applicable Compliance Method:
   The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K012 through the record keeping required in Section A.III.1 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:
   143.1 tons OC/rolling 12-month period from K009, K010, K011 and K012, combined

   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 in accordance with the schedule outlined in the facility's final Title V permit which was issued on December 31, 2001.

b. the emission testing shall be conducted to demonstrate compliance with the capture efficiency (see A.V.2.c.i) and destruction efficiency (see A.V.2.c.ii) 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 press dryer 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 press dryer; 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

1. None

Emissions Unit ID: K012

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K012 - OSM Press 380 with Thermal Oxidizer No. 3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None