



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: DRAFT PERMIT TO INSTALL MODIFICATION  
HURON COUNTY  
Application No: 03-10518**

**CERTIFIED MAIL**

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

**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 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 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, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

**HURON COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 03-10518 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 03-10518:

**2 sheetfed UV printing presses (web offset, non-heatset).**

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.

Don Waltermeyer, Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402 [(419)352-8461]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT MODIFICATION OF PERMIT TO INSTALL 03-10518**

Application Number: 03-10518

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):

**2 sheetfed UV printing presses (web offset, non-heatset).**

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

**Part I - GENERAL TERMS AND CONDITIONS**

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

**1. Monitoring and Related Recordkeeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the

previous calendar quarters. See B.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 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 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**

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic Compounds (OC)	20.8

**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>
K019 - web offset sheetfed UV printing press (OSM - 341)	OAC rule 3745-31-05(A)(3)	see A.I.2.a  2.38 pounds organic compounds (OC)/hour, as a monthly average (see A.I.2.b), 10.4 tons OC/year
	OAC rule 3745-21-07(G)	see B.1

**2. Additional Terms and Conditions**

- 2.a “Best Available Technology” (BAT) for this emissions unit has been determined to be use of inks which do not result in the emission of organic compounds.
- 2.b The OC emission limitation of 2.38 pounds/hour (as a monthly average) for emissions unit K019 is based on the following information:
  - i. there are no OC emissions from ink usage; and,
  - ii. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent\*.

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

- 2.c There are no emissions of particulate matter from this operation as there is no dryer.

## **II. Operational Restrictions**

1. The permittee shall not employ any ink, fountain solution or cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall comply with the following average OC content restrictions for the materials employed in this emissions unit:
  - a. fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and,
  - b. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

## **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 K019:
  - 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;
  - d. the OC content of each graphic arts material, in pounds/gallon, 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):

$$R_n = 20 \text{ for inks}$$

$$R_n = 0 \text{ for fountain solutions}$$

$R_n = 0$  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):

$C_n$  = For K021,  $C_n = 0$  as there is no emissions control equipment employed for this operation.

$K$  = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer). For K021,  $K = 0$  as there is no emissions control equipment employed for this operation.

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

$$E_M = E_1 + E_2 + E_3 + \dots + E_n$$

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) multiplied by 2000];
- i. the annual (tons/year) OC emission rate from emissions unit K019, calculated as follows:

$$E_T = E_{M1} + E_{M2} + E_{M3} + \dots + E_{M12}$$

Where:

$E_T$  = Annual OC emissions (tons) as summed from the previous 12 calendar months of monthly OC emissions; and,

$E_M$  = Monthly OC emissions (tons/month).

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy

of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the date of the daily record indicating non-compliance.

2. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:
  - a. the emission limitation of 2.38 pounds OC/hour (as a monthly average);
  - b. the OC content restrictions; and,
  - c. the emission limitation of 10.4 tons OC/year.
3. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

## **V. Testing Requirements**

1. Any determination of OC content\*, solids content, or density of a coating and/or cleanup material shall be based on the coating/cleanup material as employed (as applied), including the addition of any thinner or viscosity reducer to the coating/cleanup material. The company shall determine the composition of the coatings/cleanup materials by formulation data supplied by the manufacturer of the coating/cleanup material or from data determined by an analysis of each coating/cleanup material, as received, by Reference Method 24. The Ohio EPA may require the company, if it uses formulation data supplied by the manufacturer, to determine data used in the calculation of the OC content of coatings/cleanup materials by Reference Method 24 or an equivalent or alternative method.

\* "OC content" means all organic compounds that are in a coating/cleanup material expressed as pounds of OC per gallon.

2. 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:  
2.38 pounds OC/hour (as a monthly average) from K019  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K019 through the record keeping required in Section A.III.1 of this permit.
  - b. Emission Limitation:  
10.4 tons OC/year

**R R Donnelley and Sons Co**

**PTI Application: 03-10518**

**Issued: To be entered upon final issuance**

**Facility ID: 0339030135**

**Emissions Unit ID: K019**

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.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K019 - web offset sheetfed UV printing press (OSM - 341)	none	none

2. **Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

1. The permit to install for emissions unit K019 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. 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: isopropyl alcohol  
 TLV (ug/m3): 980,000  
 Maximum Hourly Emission Rate (lbs/hr): 3.81  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,520  
 MAGLC (ug/m3): 23,333

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 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.

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

**R R Donnelley and Sons Co**

**PTI Application: 03-10518**

**Issued: To be entered upon final issuance**

**Facility ID: 0339030135**

**Emissions Unit ID: K019**

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**PART II - 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>
K020 - web offset sheetfed UV printing press (OSM - 341)	OAC rule 3745-31-05(A)(3)	see A.I.2.a
	OAC rule 3745-21-07(G)	2.38 pounds organic compounds (OC)/hour, as a monthly average (see A.I.2.b), 10.4 tons OC/year  see B.1

**2. Additional Terms and Conditions**

- 2.a “Best Available Technology” (BAT) for this emissions unit has been determined to be use of inks which do not result in the emission of organic compounds.
- 2.b The OC emission limitation of 2.38 pounds/hour (as a monthly average) for emissions unit K020 is based on the following information:
  - i. there are no OC emissions from ink usage; and,
  - ii the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent\*.

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

- 2.c There are no emissions of particulate matter from this operation as there is no dryer.

## **II. Operational Restrictions**

1. The permittee shall not employ any ink, fountain solution or cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall comply with the following average OC content restrictions for the materials employed in this emissions unit:
  - a. fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and,
  - b. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

## **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 K020:
  - 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;
  - d. the OC content of each graphic arts material, in pounds/gallon, 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):

$$R_n = 20 \text{ for inks}$$

$$R_n = 0 \text{ for fountain solutions}$$

$R_n = 0$  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):

$C_n$  = For K021,  $C_n = 0$  as there is no emissions control equipment employed for this operation.

$K$  = Control efficiency as determined during the most recent performance test and maintained via parametric monitoring (tons OC controlled/100 tons OC into thermal oxidizer). For K021,  $K = 0$  as there is no emissions control equipment employed for this operation.

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

$$E_M = E_1 + E_2 + E_3 + \dots + E_n$$

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) multiplied by 2000];
- i. the annual (tons/year) OC emission rate from emissions unit K019, calculated as follows:

$$E_T = E_{M1} + E_{M2} + E_{M3} + \dots + E_{M12}$$

Where:

$E_T$  = Annual OC emissions (tons) as summed from the previous 12 calendar months of monthly OC emissions; and,

$E_M$  = Monthly OC emissions (tons/month).

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy

of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the date of the daily record indicating non-compliance.

2. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:
  - a. the emission limitation of 2.38 pounds OC/hour (as a monthly average);
  - b. the OC content restrictions; and,
  - c. the emission limitation of 10.4 tons OC/year.
3. All reports shall be submitted in accordance with Part I.A.1.c of this permit.

## **V. Testing Requirements**

1. Any determination of OC content\*, solids content, or density of a coating and/or cleanup material shall be based on the coating/cleanup material as employed (as applied), including the addition of any thinner or viscosity reducer to the coating/cleanup material. The company shall determine the composition of the coatings/cleanup materials by formulation data supplied by the manufacturer of the coating/cleanup material or from data determined by an analysis of each coating/cleanup material, as received, by Reference Method 24. The Ohio EPA may require the company, if it uses formulation data supplied by the manufacturer, to determine data used in the calculation of the OC content of coatings/cleanup materials by Reference Method 24 or an equivalent or alternative method.

\* "OC content" means all organic compounds that are in a coating/cleanup material expressed as pounds of OC per gallon.

2. 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:  
2.38 pounds OC/hour (as a monthly average) from K020  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K019 through the record keeping required in Section A.III.1 of this permit.
  - b. Emission Limitation:  
10.4 tons OC/year

**R R Donnelley and Sons Co**

**PTI Application: 03-10518**

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**Emissions Unit ID: K020**

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.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K020 - web offset sheetfed UV printing press (OSM - 341)	none	none

2. **Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

1. The permit to install for emissions unit K020 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. 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: isopropyl alcohol  
 TLV (ug/m3): 980,000  
 Maximum Hourly Emission Rate (lbs/hr): 3.81  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,520  
 MAGLC (ug/m3): 23,333

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.

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

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**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None