State of Ohio Environmental Protection Agency

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Certified Mail

8/8/2008

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dan Tatman
RR Donnelley - Greenfield Div
1025 North Washington St.
Geenfield, OH 45123

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0536010011
Permit Number: 05-14438
Permit Type: Initial Installation
County: Highland

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: OhioEPA-SWDO

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install and Operate

for

RR Donnelley - Greenfield Div

Facility ID: 0536010011
Permit Number: 05-14438
Permit Type: Initial Installation
Issued: 8/8/2008
Effective: 8/8/2008
Expiration: 8/8/2018

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate

for

RR Donnelley - Greenfield Div

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Authorization

Facility ID: 0536010011
Application Number(s): A0005910
Permit Number: 05-14438
Permit Description: Modification to establish facility wide limits.
Permit Type: Initial Installation
Permit Fee: $1,000.00
Issue Date: 8/8/2008
Effective Date: 8/8/2008
Expiration Date: 8/8/2018
Permit Evaluation Report (PER) Annual Date: February 15, for January 1 - December 31
This document constitutes issuance to:

RR Donnelley - Greenfield Div
1025 NORTH WASHINGTON ST.
GREENFIELD, OH 45123

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: 05-14438
Permit Description: Modification to establish facility wide limits.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	**R001**
Company Equipment ID:	5 Unit Lithographic press
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**R002**
Company Equipment ID:	8 Unit Lithographic press
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**R005**
Company Equipment ID:	6 Unit Heatset Offset Lithographic Press
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**R006**
Company Equipment ID:	9 Unit Heatset Offset Lithographic Press
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**R007**
Company Equipment ID:	9 Unit Heatset Offset Lithographic Press
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. **What does this permit-to-install and operate ("PTIO") allow me to do?**

   This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. **Who is responsible for complying with this permit?**

   The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

   The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. **What records must I keep under this permit?**

   You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. **What are my permit fees and when do I pay them?**

   There are two fees associated with permitted air contaminant sources in Ohio:

   - PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

     You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

   - Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. **When does my PTIO expire, and when do I need to submit my renewal application?**

   This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. **What happens to this permit if my project is delayed or I do not install or modify my source?**

   This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. **What reports must I submit under this permit?**

   An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. **If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

   If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

   The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. **What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

   You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. **Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Southwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

C. Emissions Unit Terms and Conditions

1. R001, 5 Unit Lithographic press

Operations, Property and/or Equipment Description:

Heatset printing press 350

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b and b)(2)b

b. c)(1) and c)(2)

c. d)(1), d)(2) and d)(3)

d. e)(1)

e. f)(1)b

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	4.5 lbs/hr organic compounds (OC)/hour as a monthly average. b)(2)a, b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V	OC emissions shall not exceed 95.0 tons per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined. b)(2)b.
c.	OAC rule 3745-17-11(B)	b)(2)e.
d.	OAC rule 3745-17-07(A)	b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 4.5 pounds/hour (as a monthly average) for emissions unit R001 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 50 percent*.

* This is based on the Control Techniques for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006.None.

b. The emissions of OCs shall not exceed 95.0 tons per year, for emissions units R001, R002, R005, R006 and R007 combined, based upon a rolling, 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements for the purpose of establishing federally enforceable limitations. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

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 for OC emissions, meeting the following requirements:

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 an oxidizer with a destruction efficiency of at least 92 percent when operating at the average temperature specified in c)3.

d. The requirements of this rule also include compliance with the requirements established under OAC rule 3745-31-05(C).

e. 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 Highland County, which is identified as a P-3 county.

f. 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.

c) Operational Restrictions

(1) The permittee shall comply with the following average OC content restrictions for thematerials employed in this emissions unit:

a. Ink: 45% OC by weight, as applied;

b. Coating: 10% OC by weight, as applied;

c. Fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and

d. 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 R001, R002, R005, R006 and R007 is limited by the following equation:

E_M = 3 E_n #95.0 tons

Where:

E_M = the increment of the rolling 12-month period and the subsequent emissions calculated using the following equation: $E_M = E_1 + E_2 + E_3 + ... + E_n$ (summation of all increments consumed for each product); and

E_n = the increment of the OC containing material used for each product during the period nd the subsequent emissions calculated using the following equation: $E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

And where all other variables are the same as described in d)(1)d. below.

(3) The average temperature within the oxidizer, for any 3-hour block of time when the emissions unit is in operation shall not be less than 603 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c.ii. is demonstrated during emissions testing.

d) 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 R001:

a. The name and identification number of each graphic arts material employed;

b. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

c. The quantity of each graphic arts material employed, in gallons or pounds of each material per month;

d. The OC emissions for each graphic arts material employed, in pounds or 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 (pounds of OC emitted/month);

U_n= total usage of the individual material - typically ink, fountain solution, and

cleaning solvents (lbs or gallons of material/month);

V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);

R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks

R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent

R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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 = destruction efficiency as determined during the performance test as specified in f)(2).

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the rolling, 12-month OC emission rate for emissions units R001, R002, R005, R006 and R007 combined:

a. The rolling, 12-month OC emission rate, calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12}) / 2000$ lbs

Where:

E_T = Rolling 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions; and

E_M = Monthly OC emissions (pounds/month).

(3) The permittee shall maintain monthly records of the following information in order to demonstrate compliance with the monthly average OC content of ink, fountain solution, cleanup material, and blanket wash, as employed in emissions unit R001:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month (pound{s} OC/pound ink or gallon of each material);

b. The total gallons or pounds of each individual ink, fountain solution, cleanup material, and blanket wash employed during the month;

c. The total OC usage, in pounds of OC/month, from each individual ink, fountainsolution, cleanup material, and blanket wash employed, i.e., the product of the OC content "a" times the usage "b" (above) for each material employed during the month;

d. The sum of the monthly OC usage for all inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed, i.e., the sum of "c" (above) for all inks, fountain solutions, cleanup, and blanket wash materials (e.g., lbs OC from all inks/month);

e. The total gallons or pounds of inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed during the month (e.g., lbs ink/month); and

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, i.e., "d" divided by "e" (above) for each type of material (e.g., lb OC/lb ink).

(4) The permittee shall operate and maintain a continuous temperature monitor and a temperature recorder which measure and record the average temperature within the 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 temperature within the oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition c)(3) of this permit; and

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

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

a. The monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in condition d)(3); and

b. The emission limitation of 95.0 tons OC/rolling, 12-month period.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

4.5 pounds OC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping requirements of d)(1) and d)(3).

b. Emission Limitation:

95.0 tons of OC per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(2).

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Permit to Install/Operate (PTIO).

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency, [f)(2)c.i.] and destruction efficiency, [f)(2)c.ii.] for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, 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 (the catalytic oxidizer). Therefore, during testing of the catalytic oxidizer, the permittee shall verify that a negative pressure is maintained within the press dryer.

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 catalytic oxidizer. 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.

d. As part of the performance test, the permittee shall collect and record the average temperature at the catalytic oxidizer inlet, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

(3) The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Southwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southwest District Office no later than 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 Ohio EPA Southwest District Office.

g) Miscellaneous Requirements

(1) None.

2. R002, 8 Unit Lithographic press

Operations, Property and/or Equipment Description:

Heatset printing press 380

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b and b)(2)b

b. c)(1) and c)(2)

c. d)(1), d)(2) and d)(3)

d. e)(1)

e. f)(1)b

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	6.9 lbs/hr organic compounds (OC)/hour, as a monthly average. b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V	OC emissions shall not exceed 95.0 tons per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined. b)(2)b.
c.	OAC rule 3745-17-11(B)	b)(2)e.
d.	OAC rule 3745-17-07(A)	b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 6.9 pounds/hour (as a monthly average) for emissions unit R002 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 50 percent*.

* This is based on the Control Techniques for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006.

b. The emissions of OCs shall not exceed 95.0 tons per year, for emissions units R001, R002, R005, R006 and R007 combined, based upon a rolling, 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements for the purpose of establishing federally enforceable limitations. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

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 for OC emissions, meeting the following requirements:

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 an oxidizer with a destruction efficiency of at least 92 percent when operating at the average temperature specified in c)(3) of this permit.

d. The requirements of this rule also include compliance with the requirements established under OAC rule 3745-31-05(C).

e. The uncontrolled mass rate of particulate emissions (PE) from this emissions unitis 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 Highland County, which is identified as a P-3 county.

f. 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

c) Operational Restrictions

(1) The permittee shall comply with the following average OC content restrictions for thematerials employed in this emissions unit:

a. Ink: 45% OC by weight, 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 R001, R002, R005, R006 and R007 is limited by the following equation:

E_M = 3 E_n #95.0 tons

Where:

E_M = the increment of the rolling 12-month period and the subsequent emissions calculated using the following equation: $E_M = E_1 + E_2 + E_3 + ... + E_n$ (summation of all increments consumed for each product); and

E_n = the increment of the OC containing material used for each product during the period and the subsequent emissions calculated using the following equation: $E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

And where all other variables are the same as described in d)(1)d. below.

(3) The average temperature within the oxidizer, for any 3-hour block of time when the emissions unit is in operation shall not be less than 603 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c.ii. is demonstrated during emissions testing.

d) 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 R002:

a. The name and identification number of each graphic arts material employed;

b. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

c. The quantity of each graphic arts material employed, in gallons or pounds of eachmaterial per month;

d. The OC emissions for each graphic arts material employed, in pounds or 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 (pounds of OC emitted/month);

U_n= total usage of the individual material - typically ink, fountain solution, andcleaning solvents (lbs or gallons of material/month);

V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);

R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks

R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent

R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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 = destruction efficiency as determined during the performance test as specified in f)(2).

e. The total OC emission rate of all graphic arts materials employed, in pounds or tons/month, calculated as follows:

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

Where:

E_M = Monthly OC emissions, in pounds/month; and

E_1 through E_n = OC emissions from each individual graphic arts material [d)(1)d].

f. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

g. The average hourly OC emission rate, i.e.,"e" divided by "f", above.

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the rolling, 12-month OC emission rate for emissions units R001, R002, R005, R006 and R007 combined:

a. The rolling, 12-month OC emission rate, calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12}) / 2000$ lbs

Where:

E_T = Rolling 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions; and

E_M = Monthly OC emissions (pounds/month).

(3) The permittee shall maintain monthly records of the following information in order to demonstrate compliance with the monthly average OC content of ink, fountain solution, clean up material, and blanket wash, as employed in emissions unit R002:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month (pound{s} OC/pound ink or gallon of each material);

b. The total gallons or pounds of each individual ink, fountain solution, cleanup material, and blanket wash employed during the month;

c. The total OC usage, in pounds of OC/month, from each individual ink, fountain solution, cleanup material, and blanket wash employed, i.e., the product of the OC content "a" times the usage "b" (above) for each material employed during the month;

d. The sum of the monthly OC usage for all inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed, i.e., the sum of "c" (above) for all inks, fountain solutions, cleanup, and blanket wash materials (e.g., lbs OC from all inks/month);

e. The total gallons or pounds of inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed during the month (e.g., lbs ink/month); and

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, i.e., "d" divided by "e" (above) for each type of material (e.g., lb OC/lb ink).

(4) The permittee shall operate and maintain a continuous temperature monitor and a temperature recorder which measure and record the average temperature within the 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 temperature within the oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition B.3 of this permit; and

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

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

a. The monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in condition d)(3); and

b. The emission limitation of 95.0 tons OC/rolling, 12-month period.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in condition A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

6.9 pounds OC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping requirements of d)(1) and d)(3).

b. Emission Limitation:

95.0 tons of OC per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(2)

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Permits to Install/Operate (PTIO).

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency (see E.2.c.i) and destruction efficiency (see E.2.c.ii) for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, 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 (the catalytic oxidizer). Therefore, during testing of the catalytic oxidizer, the permittee shall verify that a negative pressure is maintained within the press dryer.

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 catalytic oxidizer. 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.

d. As part of the performance test, the permittee shall collect and record the average temperature at the catalytic oxidizer inlet, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

(3) The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Southwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southwest District Office no later than 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 Ohio EPA Southwest District Office.

g) Miscellaneous Requirements

(1) None.

3. R005, 6 Unit Heatset Offset Lithographic Press

Operations, Property and/or Equipment Description:

Heatset print press 360

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b and b)(2)b

b. c)(1) and c)(2)

c. d)(1), d)(2) and d)(3)

d. e)(1)

e. f)(1)b

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	5.8 lbs/hr organic compounds (OC)/hour, as a monthly average. b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V	OC emissions shall not exceed 95.0 tons per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined. b)(2)b.
c.	OAC rule 3745-17-11(B)	b)(2)e.
d.	OAC rule 3745-17-07(A)	b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 5.8 pounds/hour (as a monthly average) for emissions unit R005 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 50 percent*.

* This is based on the Control Techniques for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006.

b. The emissions of OCs shall not exceed 95.0 tons per year, for emissions units R001, R002, R005, R006 and R007 combined, based upon a rolling, 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements for the purpose of establishing federally enforceable limitations. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

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 for OC emissions, meeting the following requirements:

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 an oxidizer with a destruction efficiency of at least 92 percent when operating at the average temperature specified in condition c)(3) of this permit.

d. The requirements of this rule also include compliance with the requirements established under OAC rule 3745-31-05(C).

e. 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 Highland County, which is identified as a P-3 county.

f. 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.

c) Operational Restrictions

(1) The permittee shall comply with the following average OC content restrictions for the materials employed in this emissions unit:

a. Ink: 45% OC by weight, as applied;

b. Coating: 10% OC by weight, as applied;

c. Fountain solution: 0.25 pound OC /gallon of fountain solution material, as applied; and

d. 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 R001, R002, R005, R006 and R007 is limited by the following equation:

$E_M = 3\ E_n$ #95.0 tons

Where:

E_M = the increment of the rolling 12-month period and the subsequent emissions calculated using the following equation: $E_M = E_1 + E_2 + E_3 + ... + E_n$ (summation of all increments consumed for each product); and

E_n = the increment of the OC containing material used for each product during the period and the subsequent emissions calculated using the following equation: $E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

And where all other variables are the same as described in d)(1)d. below.

(3) The average temperature within the oxidizer, for any 3-hour block of time when theemissions unit is in operation shall not be less than 603 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)2)c.ii. is demonstrated during emissions testing.

d) 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 R005:

a. The name and identification number of each graphic arts material employed;

b. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

c. The quantity of each graphic arts material employed, in gallons or pounds of each material per month;

d. The OC emissions for each graphic arts material employed, in pounds or 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 (pounds of OC emitted/month);

U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);

V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);

R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks

R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent

R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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 = destruction efficiency as determined during the performance test as specified in f)(2).

e. The total OC emission rate of all graphic arts materials employed, in pounds or tons/month, calculated as follows:

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

Where:

E_M = Monthly OC emissions, in pounds/month; and

E_1 through E_n = OC emissions from each individual graphic arts material [d)(1)d].

f. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

g. The average hourly OC emission rate, i.e.,"e" divided by "f", above.

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the rolling, 12-month OC emission rate for emissions units R001, R002, R005, R006 and R007 combined:

a. The rolling, 12-month OC emission rate, calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12}) / 2000$ lbs

Where:

E_T = Rolling 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions; and

E_M = Monthly OC emissions (pounds/month).

(3) The permittee shall maintain monthly records of the following information in order to demonstrate compliance with the monthly average OC content of ink, fountain solution, cleanup material, and blanket wash, as employed in emissions unit R005:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month (pound{s} OC/pound ink or gallon of each material);

b. The total gallons or pounds of each individual ink, fountain solution, cleanup material, and blanket wash employed during the month;

c. The total OC usage, in pounds of OC/month, from each individual ink, fountain solution, cleanup material, and blanket wash employed, i.e., the product of the OC content "a" times the usage "b" (above) for each material employed during the month;

d. The sum of the monthly OC usage for all inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed, i.e., the sum of "c" (above) for all inks, fountain solutions, cleanup, and blanket wash materials (e.g., lbs OC from all inks/month);

e. The total gallons or pounds of inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed during the month (e.g., lbs ink/month); and

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, i.e., "d" divided by "e" (above) for each type of material (e.g., lb OC/lb ink).

(4) The permittee shall operate and maintain a continuous temperature monitor and a temperature recorder which measure and record the average temperature within the 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 Reporting Requirements 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 temperature within the oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in c)(3) of this permit; and

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

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

a. The monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in condition d)(3); and

b. The emission limitation of 95.0 tons OC/rolling, 12-month period.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in condition A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

5.8 pounds OC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping requirements of d)(1) and d)(3).

b. Emission Limitation:

95.0 tons of OC per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(2).

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Permits to Install/Operate (PTIO).

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency [f)(2)c.i] and destruction efficiency [f)(2)c.ii] for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, 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 (the catalytic oxidizer). Therefore, during testing of the catalytic oxidizer, the permittee shall verify that a negative pressure is maintained within the press dryer.

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 catalytic oxidizer. 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.

d. As part of the performance test, the permittee shall collect and record the average temperature at the catalytic oxidizer inlet, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

(3) The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Southwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA

Southwest District Office no later than 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 Ohio EPA Southwest District Office.

g) Miscellaneous Requirements

(1) None.

4. R006, 9 Unit Heatset Offset Lithographic Press

Operations, Property and/or Equipment Description:

Heatset printing press 390

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b and b)(2)b

b. c)(1) and c)(2)

c. d)(1), d)(2) and d)(3)

d. e)(1)

e. f)(1)b

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	8.3 lbs/hr organic compounds (OC)/hour, as a monthly average. b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V	OC emissions shall not exceed 95.0 tons per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined. b)(2)b.
c.	OAC rule 3745-17-11(B)	b)(2)e.
d.	OAC rule 3745-17-07(A)	b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 8.3 pounds/hour (as a monthly average) foremissions unit R006 is based on the following information:

i. The percentage of the ink solvent retained on the web after the dryer is 20percent*;

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 50 percent*.

* This is based on the Control Techniques for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006.

b. The emissions of OCs shall not exceed 95.0 tons per year, for emissions units R001, R002, R005, R006 and R007 combined, based upon a rolling, 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements for the purpose of establishing federally enforceable limitations. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

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 for OC emissions, meeting the following requirements:

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 an oxidizer with a destruction efficiency of at least 92 percent when operating at the average temperature specified in condition c)(3) of this permit.

d. The requirements of this rule also include compliance with the requirements established under OAC rule 3745-31-05(C).

e. The uncontrolled mass rate of particulate emissions (PE) from this emissions unitis 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 Highland County, which is identified as a P-3 county.

f. 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.

c) Operational Restrictions

(1) The permittee shall comply with the following average OC content restrictions for the materials employed in this emissions unit:

a. Ink: 45% OC by weight, 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 R001, R002, R005, R006 and R007 is limited by the following equation:

$E_M = 3\ E_n$ #95.0 tons

Where:

E_M = the increment of the rolling 12-month period and the subsequent emissions calculated using the following equation: $E_M = E_1 + E_2 + E_3 + ... + E_n$ (summation of all increments consumed for each product); and

E_n = the increment of the OC containing material used for each product during the period and the subsequent emissions calculated using the following equation: $E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

And where all other variables are the same as described in d)(1)d. below.

(3) The average temperature of the combustion chamber of the oxidizer, for any 3-hour block of time when the emissions unit is in operation shall not be less than 1400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c.ii. is demonstrated during emissions testing.

d) 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 R006:

a. The name and identification number of each graphic arts material employed;

b. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

c. The quantity of each graphic arts material employed, in gallons or pounds of each material per month;

d. The OC emissions for each graphic arts material employed, in pounds or 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 (pounds of OC emitted/month);

U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);

V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);

R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks

R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent

R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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 = destruction efficiency as determined during the performance test as specified in f)(2).

e. The total OC emission rate of all graphic arts materials employed, in pounds or tons/month, calculated as follows:

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

Where:

E_M = Monthly OC emissions, in pounds/month; and

E_1 through E_n = OC emissions from each individual graphic arts material [d)(1)d.].

f. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

g. The average hourly OC emission rate, i.e.,"e" divided by "f", above.

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the rolling, 12-month OC emission rate for emissions units R001, R002, R005, R006 and R007 combined:

a. The rolling, 12-month OC emission rate, calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12}) / 2000$ lbsWhere:

$E_T =$ Rolling 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions; and

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

(3) The permittee shall maintain monthly records of the following information in order to demonstrate compliance with the monthly average OC content of ink, fountain solution, cleanup material, and blanket wash, as employed in emissions unit R006:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month (pound{s} OC/pound ink or gallon of each material);

b. The total gallons or pounds of each individual ink, fountain solution, cleanup material, and blanket wash employed during the month;

c. The total OC usage, in pounds of OC/month, from each individual ink, fountain solution, cleanup material, and blanket wash employed, i.e., the product of the OC content "a" times the usage "b" (above) for each material employed during the month;

d. The sum of the monthly OC usage for all inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed, i.e., the sum of "c" (above) for all inks, fountain solutions, cleanup, and blanket wash materials (e.g., lbs OC from all inks/month);

e. The total gallons or pounds of inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed during the month (e.g., lbs ink/month); and

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, i.e., "d" divided by "e" (above) for each type of material (e.g., lb OC/lb ink).

(4) The permittee shall operate and maintain a continuous temperature monitor and a temperature recorder which measure and record the average temperature within the 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 temperature within the oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in c)(3) of this permit; and

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

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

a. The monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in condition d)(3); and

b. The emission limitation of 95.0 tons OC/rolling, 12-month period.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in condition b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

8.3 pounds OC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping requirements of d)(1) and d)(3).

b. Emission Limitation:

95.0 tons of OC per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section d)(2).

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Permits to Install/Operate (PTIO).

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency [f)(2)c.i.] and destruction efficiency [f)(2)c.ii.] for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, 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 (the catalytic oxidizer). Therefore, during testing of the catalytic oxidizer, the permittee shall verify that a negative pressure is maintained within the press dryer.

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 catalytic oxidizer. 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.

d. As part of the performance test, the permittee shall collect and record the average temperature at the catalytic oxidizer inlet, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

(3) The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Southwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA

Southwest District Office no later than 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 Ohio EPA Southwest District Office.

g) Miscellaneous Requirements

(1) None.

5. R007, 9 Unit Heatset Offset Lithographic Press

Operations, Property and/or Equipment Description:

Heatset printing press 391

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b and b)(2)b

b. c)(1) and c)(2)

c. d)(1), d)(2) and d)(3)

d. e)(1)

e. f)(1)b

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	8.3 lbs/hr organic compounds (OC)/hour, as a monthly average. b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V	OC emissions shall not exceed 95.0 tons per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined. b)(2)b.
c.	OAC rule 3745-17-11(B)	b)(2)e.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(A)	b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 8.3 pounds/hour (as a monthly average) for emissions unit R007 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 50 percent*.

* This is based on the Control Techniques for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006.

b. The emissions of OCs shall not exceed 95.0 tons per year, for emissions units R001, R002, R005, R006 and R007 combined, based upon a rolling, 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements for the purpose of establishing federally enforceable limitations. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

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 for OC emissions, meeting the following requirements:

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 an oxidizer with a destruction efficiency of at least 92 percent when operating at the average temperature specified in c)(3) of this permit.

d. The requirements of this rule also include compliance with the requirements established under OAC rule 3745-31-05(C).

e. 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 Highland County, which is identified as a P-3 county.

f. 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.

c) Operational Restrictions

(1) The permittee shall comply with the following average OC content restrictions for the materials employed in this emissions unit:

a. Ink: 45% OC by weight, 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 R001, R002, R005, R006 and R007 is limited by the following equation:

E_M = 3 E_n #95.0 tons

Where:

E_M = the increment of the rolling 12-month period and the subsequent emissions calculated using the following equation: $E_M = E_1 + E_2 + E_3 + ... + E_n$ (summation of all increments consumed for each product); and

E_n = the increment of the OC containing material used for each product during the period and the subsequent emissions calculated using the following equation: $E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

And where all other variables are the same as described in d)(1)d. below.

(3) The average temperature of the combustion chamber of the oxidizer, for any 3-hour block of time when the emissions unit is in operation shall not be less than 1400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c.ii. is demonstrated during emissions testing.

d) 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 R007:

a. The name and identification number of each graphic arts material employed;

b. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

c. The quantity of each graphic arts material employed, in gallons or pounds of each material per month;

d. The OC emissions for each graphic arts material employed, in pounds or 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 (pounds of OC emitted/month);U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);

V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);

R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks

R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent

R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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 = destruction efficiency as determined during the performance test as specified in condition f)(2).

e. The total OC emission rate of all graphic arts materials employed, in pounds or tons/month, calculated as follows:

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

Where:

E_M = Monthly OC emissions, in pounds/month; and

E_1 through E_n = OC emissions from each individual graphic arts material [d)(1)d.].

f. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

g. The average hourly OC emission rate, i.e.,"e" divided by "f", above.

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the rolling, 12-month OC emission rate for emissions units R001, R002, R005, R006 and R007 combined:

a. The rolling, 12-month OC emission rate, calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12}) / 2000$ lbs

Where:

E_T = Rolling 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions; and

E_M = Monthly OC emissions (pounds/month).

(3) The permittee shall maintain monthly records of the following information in order to demonstrate compliance with the monthly average OC content of ink, fountain solution, cleanup material, and blanket wash, as employed in emissions unit R007:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month (pound{s} OC/pound ink or gallon of each material);

b. The total gallons or pounds of each individual ink, fountain solution, cleanup material, and blanket wash employed during the month;

c. The total OC usage, in pounds of OC/month, from each individual ink, fountain solution, cleanup material, and blanket wash employed, i.e., the product of the OC content "a" times the usage "b" (above) for each material employed during the month;

d. The sum of the monthly OC usage for all inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed, i.e., the sum of "c" (above) for all inks, fountain solutions, cleanup, and blanket wash materials (e.g., lbs OC from all inks/month);

e. The total gallons or pounds of inks, fountain solutions, cleanup materials, and blanket wash materials (separately) employed during the month (e.g., lbs ink/month); and

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, i.e., "d" divided by "e" (above) for each type of material (e.g., lb OC/lb ink).

(4) The permittee shall operate and maintain a continuous temperature monitor and a temperature recorder which measure and record the average temperature within the 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 temperature within the oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in c)(3) of this permit; and

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

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

a. The monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in condition d)(3); and

b. The emission limitation of 95.0 tons OC/rolling, 12-month period.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in condition A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

8.3 pounds OC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping requirements of d)(1) and d)(3).b.

b. Emission Limitation:

95.0 tons of OC per rolling, 12-month summation for emissions units R001, R002, R005, R006 and R007 combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(2).

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Permits to Install/Operate (PTIO).

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency [f)(2)c.i.] and destruction efficiency [f)(2)c.ii.] for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, 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 (the catalytic oxidizer). Therefore, during testing of the catalytic oxidizer, the permittee shall verify that a negative pressure is maintained within the press dryer.

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 catalytic oxidizer. 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.

d. As part of the performance test, the permittee shall collect and record the average temperature at the catalytic oxidizer inlet, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

(3) The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Southwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a

valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southwest District Office no later than 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 Ohio EPA Southwest District Office.

g) Miscellaneous Requirements

(1) None.