Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

5/12/2010

Certified Mail

Facility ID: 0339030135
Permit Number: P0087290
County: Huron

Christopher Hassmann
R. R. Donnelley & Sons Company
1145 Conwell Avenue
Willard, OH 44890

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northwest District Office

50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

614 | 644 3020
614 | 644 3184 (fax)
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Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Title V Permit
for
R. R. Donnelley & Sons Company

Facility ID:	0339030135
Permit Number:	P0087290
Permit Type:	Renewal
Issued:	5/12/2010
Effective:	6/2/2010
Expiration:	6/2/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
R. R. Donnelley & Sons Company

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Authorization

Facility ID: 0339030135
Facility Description: Book Manufacturing Facility.
Application Number(s): A0018226, A0018227, A0018228, A0018229, A0038278
Permit Number: P0087290
Permit Description: Renewal Title V Permit for a Book Printing Operation
Permit Type: Renewal
Issue Date: 5/12/2010
Effective Date: 6/2/2010
Expiration Date: 6/2/2015
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

R. R. Donnelley & Sons Company
1145 Conwell Avenue
Willard, OH 44890

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

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide

Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northwest District Office.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.
(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. An identification of each term or condition of this permit that is the basis of the certification.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittent.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.
(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.
(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.
(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.
(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) 3.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, 3745-21 and 3745-31:

   a) B003, Steam Boiler #3 (5.23 mmBtu/hr)
   b) B005, Steam Boiler #4 (5.23 mmBtu/hr)
   c) B006, Heater and MUA (4.109 mmBtu/hr)
   d) B007, Heater and MUA (4.109 mmBtu/hr)
   e) B008, Heater and MUA (4.109 mmBtu/hr)
   f) B009, Heater and MUA (4.109 mmBtu/hr)
   g) G001, Storage Tanks A, B & C, Diesel, Gasoline & Kerosene Dispensing Facility
   h) P035, PBR, 390 hp Diesel emergency backup generator
   i) P036, PBR, xx hp Diesel fire fighting pump

   [OAC rule 3745-77-07(A)(13)]

3. The following insignificant emissions units are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

   a) P033, Aerosolve can depressurization Unit #1
   b) P034, Aerosolve can depressurization Unit #2
   c) T006, 6,000 gallon Underground Storage Tank #14
   d) T007, 6,000 gallon Underground Storage Tank #15
   e) T008, 6,000 gallon Underground Storage Tank #16
   f) T009, 8,000 gallon Underground Storage Tank #17

C. Emissions Unit Terms and Conditions

1. K006, Press 323

Operations, Property and/or Equipment Description:

Web Offset Heatset Printing

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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) (P0104538, administrative modification issued on 6/11/09)	See b)(2)d. and b)(2)e. 13.0 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]
b.	OAC rule 3745-31-05(D)	32.5 tons OC/rolling, 12-month period See b)(2)c.
c.	OAC rule 3745-21-07(G)	See b)(2)h. and c)(4).
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.

(2) Additional Terms and Conditions

a. The OC emission limitation of 13.0 pounds/hour for heatset operations (as a monthly average) for this emissions unit is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The OC emission limitation of 13.0 pounds/hour for nonheatset operations (as a monthly average) for emissions unit K006 is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 32.5 tons per year, for this emissions unit , based upon a rolling, 12-month summation of the monthly emission rates. The OC emission limitation is based on the OC content, usage restrictions and the OC control requirements for the purpose of establishing federally enforceable limitations to avoid Prevention of Significant Deterioration (PSD) applicability. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

d. The permittee shall employ best available technology (BAT) on this emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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

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

g. 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.

h. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.
[OAC rule 3745-77-07(A)(1) and P0104538]

(2) The maximum rolling, 12-month usage rate of OC containing materials for emission unit K006 is limited by the following equation:

$E_M = \sum E_n \leq 32.5$ 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a rolling, 12-month summation.
[OAC rule 3745-77-07(A)(1) and P0104538]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104538]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in this emissions unit is prohibited.
[OAC rule 3745-77-07(A)(1) and P0104538]

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 this emissions unit:

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions

R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.],

* To be recorded and calculated for heatset and non-heatset operations separately.
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 limitation for this emissions unit :

a. The cumulative year-to-date OC emissions; and

b. 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;
E_M = Monthly OC emissions (pounds/month).
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 this emissions unit:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month, in 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 d)(3)a. times the usage d)(3)b.], 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 d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in 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, in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.
[OAC rule 3745-77-07(C)(1)] and P0104538]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when the emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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 thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

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

[OAC rule 3745-77-07(C)(1) and P0104538]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exeedances of the emission limitation of 13.0 pounds OC/hour for heatset and non-heatset operations, as determined in d)(1);

b. all exeedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exeedances of the rolling, 12-month OC emission limitation of 32.5 tons

[OAC rule 3745-77-07(C)(1) and P0104538]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer did not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
13.0 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

Applicable Compliance Method:
The permittee shall demonstrate compliance with the OC emission limitation above through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104538]

b. Emission Limitation:
32.5 tons OC/rolling 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(1) and d)(2) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.

[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the

materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.
[P0104538]

2. K007, Press 324

Operations, Property and/or Equipment Description:

Web Offset Heatset Printing

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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) (P0104538, administrative modification issued on 6/11/09)	See b)(2)d. and b)(2)e. 11.8 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]
b.	OAC rule 3745-31-5(D)	29.5 tons OC/rolling 12-month period for emission unit K007 See b)(2)c.
c.	OAC rule 3745-21-07(G)	See b)(2)h. and c)(4).
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.

(2) Additional Terms and Conditions

a. The OC emission limitation of 11.8 pounds/hour for heatset operations (as a monthly average) for emissions unit K007 is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The OC emission limitation of 11.8 pounds/hour for nonheatset operations (as a monthly average) for emissions unit K007 is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 29.5 tons per year, for emissions unit K007, 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 to avoid Prevention of Significant Deterioration (PSD) applicability. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

d. The permittee shall employ best available technology (BAT) on this emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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

f. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition,

Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

g. 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.

h. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.

[OAC rule 3745-77-07(A)(1) and P0104538]

(2) The maximum rolling 12-month usage rate of OC containing materials for emission unit K007 is limited by the following equation:

$E_M = \sum E_n \leq 29.5$ 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a rolling 12-month summation.

[OAC rule 3745-77-07(A)(1) and P0104538]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104538]

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

(5)
[OAC rule 3745-77-07(A)(1) and P0104538]

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 K007:

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.].

* To be recorded and calculated for heatset and non-heatset operations separately.

[OAC rule 3745-77-07(C)(1) and P0104538]

(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 unit K007:

a. The cumulative year-to-date OC emissions; and

b. 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;
E_M =Monthly OC emissions (pounds/month).

[OAC rule 3745-77-07(C)(1) and P0104538]

(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 K007:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month in 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 d)(3)a. times the usage d)(3)b.] 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 d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in 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 in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.

[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when the emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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 thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

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

[OAC rule 3745-77-07(C)(1) and P0104538]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify:

a. all exeedances of the OC emission limitation of 11.8 pounds hour for heatset and non-heatset operations, as determined in d)(1);

b. all exeedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exeedances of the rolling, 12-month OC emission limitation of 29.5tons.

[OAC rule 3745-77-07(C)(1) and P0104538]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer did not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
11.8 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

Applicable Compliance Method:
The permittee shall demonstrate compliance with the OC emission limitation above through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104538]

b. Emission Limitation:
29.5 tons OC/rolling 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(1) and d)(2) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.

[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual

emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.
[P0104538]

3. K018, Press 327

Operations, Property and/or Equipment Description:

Web Offset Heatset Printing

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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) (P0104538, administrative modification issued 6/11/09)	See b)(2)d. and b)(2)e. 14.8 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]
b.	OAC rule 3745-31-05(D)	37.0 tons OC/rolling 12-month period for emission unit K018 See b)(2)c.
c.	OAC rule 3745-21-07(G)	See b)(2)h. and c)(4).
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.

(2) Additional Terms and Conditions

a. The OC emission limitation of 14.8 pounds/hour for heatset operations (as a monthly average) for emissions unit K018 is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The OC emission limitation of 14.8 pounds/hour for nonheatset operations (as a monthly average) for emissions unit K018 is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 37.0 tons per year, for emissions unit K018, 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 to avoid Prevention of Significant Deterioration (PSD) applicability. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

d. The permittee shall employ best available technology (BAT) on this emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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

f. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition,

Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

g. 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.

h. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.
[OAC rule 3745-77-07(A)(1) and P0104538]

(2) The maximum rolling, 12-month usage rate of OC containing materials for emission unit K018 is limited by the following equation:

$E_M = \sum E_n \leq 37.0$ 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a rolling, 12-month summation.
[OAC rule 3745-77-07(A)(1) and P0104538]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104538]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in this emissions unit is prohibited.
[OAC rule 3745-77-07(A)(1) and P0104538]

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 K018:*

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.].

* To be recorded and calculated for heatset and non-heatset operations separately.
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 emission unit K018:

a. The cumulative year-to-date OC emissions; and

b. 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;

E_M =Monthly OC emissions (pounds/month).
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 K018:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month in 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 d)(3)a. times the usage d)(3)b.] 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 d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in: 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 in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when the emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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 thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exeedances of the OC emission limitation of 14.8 pounds /hour for heatset and non-heatset operations, as determined in d)(1);

b. all exeedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exeedances of the rolling, 12-month emission limitation of 37.0 tons.

[OAC rule 3745-77-07(C)(1) and P0104538]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer does not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of

40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
14.8 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

Applicable Compliance Method:
The permittee shall demonstrate compliance with these emission limitations through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104538]

b. Emission Limitation:
37.0 tons OC/rolling, 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(1) and d)(2) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.

[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.
[P0104538]

4. K021, Press 343

Operations, Property and/or Equipment Description:

Sheetfed UV Press

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(1) and d)(2)

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 3745-21-07(G)	See b)(2)e. and c)(1)
b.	OAC rule 3745-31-05(D) (PTI No. 03-13376, issued on 10/29/02)	13.4 tons OC/rolling, 12-month period See b)(2)b.
c.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13376, issued on 10/29/02)	See b)(2)a. and b)(2)c. 5.37 pounds organic compounds (OC)/hour, as a monthly average

(2) Additional Terms and Conditions

a. The OC emission limitation of 5.37 pounds/hour (as a monthly average) for emissions unit K021 is based on the following information:

i. no OC emissions from ink usage; and,

ii. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent*.

*This is based on information supplied by the permittee.

b. The permittee has requested a federally enforceable limitation of 13.4 tons OC/rolling 12-month period for emissions unit K021 based on the OC content and the usage restrictions for the purpose of avoiding PSD applicability.

c. “Best Available Technology” (BAT) for this emissions unit has been determined to be use of inks which do not result in the emission of organic compounds.

d. There are no emissions of particulate matter from this operation as there is no dryer.

e. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(1), d)(3)b. and e)(2).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

(1) The permittee shall not employ any ink, fountain solution or cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5)
[OAC rule 3745-77-07(A)(1) and PTI #03-13376]

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

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

b. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.
[OAC rule 3745-77-07(A)(1) and PTI #03-13376]

(3) The maximum rolling 12-month usage rate of OC containing materials for emissions unit K021 is limited by the following equation:

$$\sum_{M-1}^{12} \sum_{n} [(U_n)(V_n)(1-R_n/100)(1-(C_n/100)(K/100))] \leq 13.4$$

Where,

M = the increment of the rolling 12-month period; and,
n = the increment of the OC containing material used during the period
And where all other variables are the same as described in d)(3)e. below.
[OAC rule 3745-77-07(A)(1) and PTI #03-13376]

d) Monitoring and/or Recordkeeping Requirements

(1) The permit to install for emissions unit K021 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: butyl cellosolve (2 butyoxy ethanol)
TLV (ug/m3): 7,530
Maximum Hourly Emission Rate (lbs/hr): 0.009
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.7044
MAGLC (ug/m3): 179

Pollutant: isopropyl alcohol
TLV (ug/m3): 983,000
Maximum Hourly Emission Rate (lbs/hr): 1.43
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 111.9
MAGLC (ug/m3): 23,405

Pollutant: ethanol
TLV (ug/m3): 1,880,000
Maximum Hourly Emission Rate (lbs/hr): 0.54
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42.27
MAGLC (ug/m3): 44,762

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)
[PTI #03-13376]

(2) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
[PTI #03-13376]

(3) 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 K021:

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

b. documentation on whether or not each material employed is a photochemically reactive material;

c. the quantity of each graphic arts material employed, in gallons;

d. the OC content of each graphic arts material, in pounds/gallon, as applied;

e. the OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

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

Where:

E_n= OC emissions from an individual material (tons OC emitted/month);
U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);

V_n= Average OC content of material as determined by Method 24 (lb OC/lb material);
R_n= Amount of OC retained on the web or on cloths (tons OC retained/100 tons OC used):

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

C_n= Capture efficiency for individual material emitted (tons OC captured/100 tons OC into dryer):
C_n = For K021, C_n = 0 as there is no emissions control equipment employed for this operation.

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

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

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

Where:

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

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

h. the average hourly OC emission rate [d)(3)f. divided by d)(3)g.) multiplied by 2000];

i. the rolling, 12-month OC emission rate from emissions unit K021, calculated as follows:

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

Where:

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

E_M =Monthly OC emissions (tons/month).
[OAC rule 3745-77-07(C)(1) and PTI #03-13376]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exeedances of the OC emission limitation of 5.37 pounds /hour (as a monthly average), as determined in d)(3);

b. all exeedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exeedances of the rolling, 12-month OC emission limitation of 13.4.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each month during which any photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

* "OC content" means all organic compounds that are in a coating/cleanup material expressed as pounds of OC per gallon.
[OAC rule 3745-77-07(C)(1)]

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

a. Emission Limitation:
5.37 pounds OC/hour (as a monthly average) from K021

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly, as a monthly average, OC emission limitation from unit K021 through the record keeping required in d)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-13376]

b. Emission Limitation:
13.4 tons OC/rolling 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-13376]

g) Miscellaneous Requirements

(1) None.

5. K027, Press 381

Operations, Property and/or Equipment Description:

Web Offset Heatset Printing

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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) (P0105541, administrative modification issued on 10/08/09)	See b)(2)d. 5.60 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]
b.	OAC rule 3745-31-05(D) (P015541, administrative modification issued on 10/08/09)	14.0 tons OC/rolling, 12-month period for emission unit K027 See b)(2)c.
c.	OAC rule 3745-21-07(G)	See b)(2)g. and c)(4)
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.

(2) Additional Terms and Conditions

a. The OC emission limitation of 5.60 pounds/hour for heatset operations (as a monthly average) for emissions unit K027 is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The OC emission limitation of 5.60 pounds/hour for nonheatset operations (as a monthly average) for emissions unit K027 is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 14.0 tons per year, for emissions unit K027, based upon a 12-month summation of the monthly emissions. The OC emission limitation is based on OC content, usage restrictions and OC control requirements.

d. The permittee shall employ best available technology (BAT) on this emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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 Huron 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.

g. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.
[OAC rule 3745-77-07(A)(1) and P0104538]

(2) The maximum 12-month usage rate of OC containing materials for emission unit K027 is limited by the following equation:

$E_M = \sum E_n \leq 14.0$ tons

where,

E_M = the increment of the 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a 12-month summation.

[OAC rule 3745-77-07(A)(1) and P0104538]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104538]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in this emissions unit is prohibited.
[OAC rule 3745-77-07(A)(1) and P0104538]

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 K027:*

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.].

* To be recorded and calculated for heatset and non-heatset operations separately.
[OAC rule 3745-77-07(C)(1) and P0104538]

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the 12-month OC emission rate for emission unit K027:

a. The cumulative year-to-date OC emissions; and

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

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

where:

E_T = 12-month OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (pounds/month).
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 K027:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month, in 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 d)(3)a. times the usage d)(3)b.] 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 d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in 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, in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when the emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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 thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exeedances of the OC emission limitation of 5.60 pounds /hour for heatset and non-heatset operations, as determined in d)(1);

b. all exceedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exeedances of the rolling, 12-nonth OC emission limitation of 14.0 tons.

[OAC rule 3745-77-07(C)(1) and P0104538]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer did not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in

mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
5.60 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

Applicable Compliance Method:

The permittee shall demonstrate compliance with these emission limitations through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104538]

b. Emission Limitation:
14.0 tons OC/12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(1) and d)(2) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.
[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) None.

6. P015, Paper Separation Process #7 (cyclone)

Operations, Property and/or Equipment Description:

Paper/Air Separation Process

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

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 3745-17-11(B)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3) (PTI No. 03-10834, issued on 2/8/01)	9.9 lbs particulate emissions (PE)/hour
d.	OAC rule 3745-31-05(D) (PTI No. 03-10834, issued on 2/8/01)	24.9 tons PE/rolling, 12-month period

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of 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 because the facility is located in Huron County, which is identified as a P-3 county.

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

c. The 9.9 lbs PE/hour emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

(1) The maximum annual production rate for emissions unit P015, shall not exceed 49,800 tons of paper processed, based upon a rolling, 12-month summation of the monthly production rates.

Compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the monthly paper production rates.
[OAC rule 3745-77-07(A)(1) and PTI #03-10834]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for emissions unit P015:

a. the production rate (amount of paper baled), in tons;

b. the monthly cumulative paper production rates, in tons;

c. the rolling, 12-month summation of the monthly paper production rates; and

d. the rolling, 12-month summation of the monthly PE rates, in tons [d)(1)c. x 1*/2000].

* This emission factor (1 lb PE/ton of paper shredded and baled) was derived by the permittee based on the results of the emission testing conducted for this emissions unit on July 7, 1999.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exceedances of the rolling, 12-month paper production restriction for emissions unit P015 of 49,800 tons;

b. all exceedances of the rolling, 12-month PE limitation for emissions unit P015 of 24.9 tons; and

c. all exceedances of the monthly cumulative paper production rate restrictions.

[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. Emission Limitation:
9.9 pounds PE/hour

Applicable Compliance Method:
Compliance with the hourly limitation may be determined by multiplying the maximum production rate (18,800 pounds of paper/hour) by the emission factor of 1.0 pound PE/ton paper shredded and baled.

If required, the permittee shall demonstrate compliance with the hourly limitation pursuant to Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

b. Emission Limitation:
24.9 tons PE/rolling, 12-month period, from emissions unit P015

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

c. Emission Limitation:
49,800 tons of paper processed, based on 12-month, rolling summation of monthly production rates

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

g) Miscellaneous Requirements

(1) None.

7. Emissions Unit Group - Group 1: B001, B004,

EU ID	Operations, Property and/or Equipment Description
B001	Cleaver Brooks Boiler #1 w/Oil Back Up (10.461 MMBTU/HR)
B004	Cleaver Brooks Boiler #2 w/Oil Back Up (10.461 MMBTU/HR)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

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 3745-17-10(B)	0.020 pound particulate emissions (PE)/mmBtu of actual heat input
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
c.	OAC rule 3745-18-06(D)	1.6 pounds sulfur dioxide (SO2)/mmBtu of actual heat input
d.	40 CFR 63.52(a)(2)	See b)(2)b.

(2) Additional Terms and Conditions

a. These emissions units were installed prior to June 9, 1989 and, therefore, are not subject to 40 CFR, Part 60, Subpart Dc.

b. These emissions units are subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this Title V permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or number 2 fuel oil as fuel in these emissions units.
[OAC rule 3745-77-07(A)(1)]

(2) The quality of oil burned in these emissions units shall meet, on an as-received basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs SO2/mmBtu of actual heat input.
[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas and/or number 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in any emissions unit.
[OAC rule 3745-77-07(C)(1)]

(2) For each shipment of oil received for burning in any emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in any emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number 2 fuel was burned in any emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall notify the Northwest District Office in writing of any record that shows a deviation of the allowable sulfur dioxide limitation specified in c)(2) of this permit. The notification shall include a copy of such record and shall be sent to the Northwest District Office within 45 days after the deviation occurs.
[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:
When firing natural gas, the permittee may demonstrate compliance by multiplying an emission factor of 1.9 lbs PE (filterable)/mmcu. ft. of natural gas by the emissions unit's maximum hourly fuel consumption rate (10,461 cu. ft./hr), and then dividing by the emissions unit's maximum heat input capacity (10.5 mmBtu/hr).

When firing #2 fuel oil or a combination of #2 fuel oil and natural gas, the permittee may demonstrate compliance by multiplying an emission factor of 2 lbs PE/1,000 gallons of oil by the emissions unit's maximum hourly fuel consumption rate (75 gallons/hr), and then dividing by the emissions unit's maximum heat input capacity (10.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(9).
[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).
[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:
1.6 pounds SO2/mmBtu of actual heat input

Applicable Compliance Method:
When firing fuel oil, except as provided below, compliance with the allowable SO2 emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

If required, the permittee shall demonstrate compliance with this emission limitation (when firing # 2 fuel oil) in accordance with 40 CFR, Part 60, Appendix A, Method 6C.
[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

8. Emissions Unit Group - Group 2: K002, K003, K004

EU ID	Operations, Property and/or Equipment Description
K002	Web Offset Heatset Printing: Press 333
K003	Web Offset Heatset Printing: Press 332
K004	Web Offset Heatset Printing: Press 322

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

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 3745-17-11(B)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-21-07(G)	See b)(2)c. and c)(1)
d.	OAC rule 3745-31-05 (PTI #03-379)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G).

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions (PE) from each 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 because the facility is located in Huron County, which is identified as a P-3 county.

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

c. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until

the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(1), d)(1) and e)(1).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

(1) The permittee shall not employ any liquid organic material (graphic arts material and/or cleanup material) in any emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following information each month for each emissions unit:

a. the company identification of each liquid organic material employed; and

b. documentation on whether or not each liquid organic material employed is a photochemically reactive material
[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall notify the Northwest District Office in writing of any monthly record showing the use of noncomplying liquid organic materials (i.e., photochemically reactive materials) in any emissions unit. The notification shall include a copy of such record and shall be sent to the Northwest District Office within 30 days of the date of the record indicating noncompliance.
[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

9. Emissions Unit Group - Group 3: K009, K010, K011, K012

EU ID	Operations, Property and/or Equipment Description
K009	Web Offset Printing: Press 335 with RTOs
K010	Web Offset Printing: Press 326 with RTOs
K011	Web Offset Printing: Press 336 with RTOs
K012	Web Offset Printing: Press 380 with RTOs

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) g)(1)

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) (P0104538, administrative Modification issued on 6/11/09)	See b)(2)d. and b)(2)e. For K009, 15.3 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.] For K010, 13.7 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.] For K011, 14.2 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.] For K012, 14.1 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D)	143.1 tons OC/rolling, 12-month period for emission units K009, K010, K011 and K012 combined See b)(2)c.
c.	OAC rule 3745-21-07(G)	See b)(2) h. and c)(4)
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.

(2) Additional Terms and Conditions

a. The hourly OC emission limitation for heatset operations (as a monthly average) for each emissions unit is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The hourly OC emission limitation for nonheatset operations (as a monthly average) for each emissions unit is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 143.1 tons per year, for emissions units K009, K010, K011 and K012 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 to avoid Prevention of Significant Deterioration (PSD) applicability. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

d. The permittee shall employ best available technology (BAT) on this emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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

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

g. 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.

h. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.
[OAC rule 3745-77-07(A)(1) and P0104538]

(2) The maximum rolling 12-month usage rate of OC containing materials for emission units K009, K010, K011 and K012 is limited by the following equation:

$E_M = \sum E_n \leq 143.1$ 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a rolling, 12-month summation.
[OAC rule 3745-77-07(A)(1) and P0104538]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104538]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in this emissions unit is prohibited.
[OAC rule 3745-77-07(A)(1) and P0104538]

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 each emissions unit:

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.].

* To be recorded and calculated for heatset and non-heatset operations separately.
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 unit K009, K010, K011 and K012, combined:

a. The cumulative year-to-date OC emissions; and

b. 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;
E_M =Monthly OC emissions (pounds/month).
[OAC rule 3745-77-07(C)(1) and P0104538]

(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 each emissions unit:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month, in 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 d)(3)a. times the usage d)(3)b.] 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

d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in: 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, in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when each emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exceedances of the hourly OC emission limitation for heatset and non-heatset operations, as determined in d)(1);

b. all exceedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exceedances of the rolling, 12-month OC emission limitation of 143.1 tons.

[OAC rule 3745-77-07(C)(1) and P0104538]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer does not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104538]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104538]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
Hourly OC emissions (as a monthly average), as specified in b)(1) for heatset and non-heatset operations

Applicable Compliance Method:
The permittee shall demonstrate compliance with these emission limitations through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104538]

b. Emission Limitation:
143.1 tons OC/rolling, 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(2) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104538]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.
[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.
[P0104538]

10. Emissions Unit Group - Group 4: K013

EU ID	Operations, Property and/or Equipment Description
K013	Web Offset Heatset Printing: Press 320

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

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 3745-17-11(B)	See b)(1)a.
b.	OAC rule 3745-17-07(A)	See b)(1)b.
c.	OAC rule 3745-21-07(G)	See b)(2)c.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions (PE) from each 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 because the facility is located in Huron County, which is identified as a P-3 county.

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

c. Each emissions unit was installed prior to February 15, 1972 and, therefore, OAC rule 3745-21-07 is not applicable.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

11. Emissions Unit Group - Group 5: K022, K023

EU ID	Operations, Property and/or Equipment Description
K022	Web Offset Heatset Printing: Press 352 with RTOs
K023	Web Offset Heatset Printing: Press 353 with RTOs

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

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

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) (PTI No. 03-13427, issued on 10/29/02)	See b)(2)a. and b)(2)c. For K022, 4.62 pounds organic compounds (OC) emissions/hour, as a monthly average, 20.2 tons OC/year For K023, 4.62 pounds organic compounds (OC) emissions/hour, as a monthly average, 20.2 tons OC/year
b.	OAC rule 3745-31-05(D)	23.1 tons OC/rolling, 12-month period [for emissions units K022 and K023, combined, see b)(2)b.]
c.	OAC rule 3745-21-07(G)	See b)(2)f. and c)(4)
d.	OAC rule 3745-17-11(B)	See b)(2)d.
e.	OAC rule 3745-17-07(A)	See b)(2)e.

(2) Additional Terms and Conditions

a. The OC emission limitation of 4.62 pounds/hour (as a monthly average) and 20.2 tons/year for each emissions unit is based on the following information:

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

ii. the percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

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

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

b. The permittee has requested a federally enforceable limitation of 23.1 tons OC/rolling 12-month period for emissions units K022 and K023 combined based on OC content, usage restrictions and OC control requirements for both units for the purpose of avoiding PSD applicability.

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

i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent of the press dryer exhaust; and,

ii. The control system shall be equipped with a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at an average temperature of 1400 degrees Fahrenheit or greater.

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

e. Each 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.

f. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(4)b. and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

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: 0.45 pound OC/pound of ink, as applied;

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

c. cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(2) The maximum rolling 12-month usage rate of OC containing materials for emissions units K022 and K023 combined is limited by the following equation:

$$\sum_{M=1}^{12} \sum_{n} \left[\left(U_n\right)\left(V_n\right)\left(1 - R_n/100\right)\left(1 - \left(C_n/100\right)\left(K/100\right)\right)\right] \leq 23.1$$

Where,

M = the increment of the rolling 12-month period; and,
n = the increment of the OC containing material used during the period
And where all other variables are the same as described in d)(2)e. below.
[OAC rule 3745-77-07(C)(1)]

(3) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1300 degrees Fahrenheit.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in each emissions unit is prohibited.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

d) Monitoring and/or Recordkeeping Requirements

(1) The permit to install for each emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic

Policy") was applied for each pollutant emitted by the emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethylene glycol
TLV (mg/m3): 127
Maximum Hourly Emission Rate (lbs/hr): 4.62*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.55
MAGLC (ug/m3): 3,024
* assume that all of the emissions are ethylene glycol

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
[PTI #03-13427]

(2) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
[PTI #03-13427]

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

a. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
[PTI #03-13427]

(4) 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 each emissions unit:

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

b. documentation on whether or not each material employed is a photochemically reactive material;

c. the quantity of each graphic arts material employed, in gallons (in pounds for inks);

d. the OC content of each graphic arts material, in pounds/gallon (in pounds/pound for inks), as applied;

e. the OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

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

Where:

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

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

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

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

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

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

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

Where:

E_M = Monthly OC emissions, in tons/month; and,
E_n = OC emissions from each individual graphic arts material [d)(2)e.]

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

h. the average hourly OC emission rate [(d)(2)f. divided by d)(2)g.) divided by 2000];

i. the rolling, 12-month OC emission rate from emissions units K022 and K023, combined, calculated as follows:

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

Where:

E_T =Annual OC emissions (tons) as summed from the previous 12 months of monthly OC emissions;
E_M =Monthly OC emissions (tons/month).
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(5) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when each 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 each emissions unit:

a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1400 degrees Fahrenheit; and,

b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify the following:

a. all exeedances of the OC emission limitation of 4.62 pounds /hour (as a monthly average);

b. all exeedances of the OC content restrictions in c)(1); and,

c. all exeedances of the rolling, 12-month OC emission limitation of 23.1 (for emissions units K022 and K023, combined).

[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer does not comply with the temperature limitation specified in d)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

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

a. Emission Limitation:
4.62 pounds OC/hour (as a monthly average) and 20.2 tons OC/year, from each emissions unit.

Applicable Compliance Method:
The permittee shall demonstrate compliance with these emission limitations through the record keeping required in d)(4) of this permit.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

b. Emission Limitation:
23.1 tons OC/rolling, 12-month period, for emissions unit K022 and K023, combined

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(4) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-13427]

g) Miscellaneous Requirements

(1) None.

12. Emissions Unit Group - Group 6: K024, K025

EU ID	Operations, Property and/or Equipment Description
K024	Web Offset Printing: Press 328 with RTOs
K025	Web Offset Printing: Press 329 with RTOs

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) d)(5) and d)(6)

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) (P0104520, administrative modification issued on 4/20/09)	See b)(2)d. and b)(2)e. For K024, 10.00 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.] For K025, 5.6 pounds organic compounds (OC)/hour, as a monthly average, for heatset operations [See b)(2)a.], and nonheatset operations [See b)(2)b.]
b.	OAC rule 3745-31-05(D)	39.0 tons OC/rolling, 12-month period for emission units K024 and K025, combined [See b)(2)c.]
c.	OAC rule 3745-21-07(G)	See b)(2)h. and c)(4)
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.

(2) Additional Terms and Conditions

a. The hourly OC emission limitation for heatset operations (as a monthly average) for each emissions unit is based on the following information:

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

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**.

b. The hourly OC emission limitation for nonheatset operations (as a monthly average) for each emissions unit is based on the following information:

i. the percentage of the ink solvent retained on the web is 95 percent*;

ii. the percentage of the fountain solution solvent available for capture is 0 percent*;

iii. the percentage of the auto blanket wash (clean up) solvent available for capture is 0 percent*; and,

iv. the percentage of the hand blanket wash (clean up) solvent retained on the cloths is 75 percent**

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

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

c. The emissions of OCs shall not exceed 39.0 tons per year, for emissions units K024 and K025 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 to avoid Prevention of Significant Deterioration (PSD) applicability. For purposes of federal enforceability, OC limitations effectively restrict VOC emissions.

d. The permittee shall employ best available technology (BAT) on each emissions unit. It has been determined that BAT control requirements do not include the use of the thermal oxidizer during nonheatset operations. BAT for heatset operations 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 a thermal oxidizer with a destruction efficiency of at least 95 percent when operating at the average temperature specified in c)(3) of this permit.

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

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

g. Each 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.

h. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(4), d)(1)b and e)(4).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

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

a. Ink: 0.45 pound OC /pound of ink for heatset operations, as applied;

1.70 pound OC / gallon of ink for nonheatset operations, 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.
[OAC rule 3745-77-07(A)(1) and P0104520]

(2) The maximum rolling 12-month usage rate of OC containing materials for emission units K024 and K025 is limited by the following equation:

$E_M = \sum E_n \leq 39.0$ 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 paragraph d)(1)e. below.

Compliance with the annual usage restriction shall be based upon a rolling, 12-month summation.
[OAC rule 3745-77-07(A)(1) and P0104520]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when each emissions unit is in operation in heatset mode, shall not be less than 1,400 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in b)(2)c. is demonstrated during emissions testing.
[OAC rule 3745-77-07(A)(1) and P0104520]

(4) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in each emissions unit is prohibited.
[OAC rule 3745-77-07(A)(1) and P0104520]

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 each emissions unit:

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

b. Documentation on whether or not each material employed is a photochemically reactive material;

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

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

e. 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 heatset inks
R_n = 95 for non-heatset inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 75 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

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

K = destruction efficiency as determined during the performance test as specified in f)(2). (K = 0 for all non-heatset operations)

f. 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)e.]

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

h. The average hourly OC emission rate, [i.e., d)(1)f. divided by d)(1)g.].

* To be recorded and calculated for heatset and non-heatset operations separately.
[OAC rule 3745-77-07(C)(1) and P0104520]

(2) In addition to the above information, the permittee shall maintain monthly records of the following in order to demonstrate compliance with the initial monthly OC emission rate, and the rolling, 12-month OC emission rate for emissions unit K024 and K025, combined:

a. The cumulative year-to-date OC emissions; and

b. 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;
E_M =Monthly OC emissions (pounds/month).
[OAC rule 3745-77-07(C)(1) and P0104520]

(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 each emissions unit:

a. The OC content of each ink, fountain solution, cleanup material, and blanket wash employed during the month in 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 d)(3)a. times the usage d)(3)b.] 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 d)(3)c.] for all inks, fountain solutions, cleanup, and blanket wash materials in 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, in lbs ink/month;

f. The monthly average OC per gallon or pound of ink, fountain solution, cleanup material, and blanket wash, [i.e., d)(3)d. divided by d)(3)e.] for each type of material in lb OC/lb ink.
[OAC rule 3745-77-07(C)(1) and P0104520]

(4) The permittee shall operate and maintain continuous temperature monitors* and a temperature recorder which measures and records the average temperature within the thermal oxidizer when each emissions unit is in operation in heatset mode. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

* This temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the thermal oxidizer, when the emissions unit was in operation in heatset mode, was less than the temperature limitation specified in c)(3); and,

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1)]

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

Pollutant: ethylene glycol
TLV (mg/m^3): 127
Maximum Hourly Emission Rate (lbs/hr): 2.34*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 3.64
MAGLC (ug/m^3): 3,024

* assume that all of the emissions are ethylene glycol

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

a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
[P0104520]

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

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.
[P0104520]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exceedances of the hourly OC emission limitation for heatset and non-heatset operations, as determined in d)(1);

b. all exceedances of the monthly average OC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in d)(3); and

c. all exceedances of the rolling, 12-month OC emission limitation of 39.0 tons.

[OAC rule 3745-77-07(C)(1) and P0104520]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify all 3-hour blocks of time during which the average temperature within the thermal oxidizer does not comply with the temperature limitation specified in c)(3) of this permit.
[OAC rule 3745-77-07(C)(1) and P0104520]

(3) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include a log of the downtime for the capture (collection) system and/or the thermal oxidizer when the emissions unit was in operation in heatset mode.
[OAC rule 3745-77-07(C)(1) and P0104520]

(4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, which identify each day during which a photochemically reactive material was employed.
[OAC rule 3745-77-07(C)(1) and P0104520]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% OC control efficiency and the 100% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest

emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
[OAC rule 3745-77-07(C)(1)]

(2) 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:
For K024, 10.00 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

For K025, 5.6 pounds OC/hour (as a monthly average), for heatset and non-heatset operations

Applicable Compliance Method:
The permittee shall demonstrate compliance with these emission limitations through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104520]

b. Emission Limitation:
39.0 tons OC/rolling, 12-month period

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation through the record keeping required in d)(2) of this permit.

[OAC rule 3745-77-07(C)(1) and P0104520]

c. Emission Limitation:
95% OC control efficiency and 100% OC capture efficiency

Applicable Compliance Method:
The permittee shall demonstrate compliance with the control efficiency and capture efficiency restrictions in accordance with the methods as outlined in f)(1) above.
[OAC rule 3745-77-07(C)(1) and P0104538]

g) Miscellaneous Requirements

(1) None.

13. Emissions Unit Group - Group 7: P009, P014, P027, P028, P029, P030, P031

EU ID	Operations, Property and/or Equipment Description
P009	Paper/Air Separation Process #4 (cyclone)
P014	Paper/Air Separation Process #6 (cyclone)
P027	Paper/Air Separation Process #5 (cyclone)
P028	Paper/Air Separation Process #1 (cyclone)
P029	Paper/Air Separation Process #2 (cyclone)
P030	Paper/Air Separation Process #3 (cyclone)
P031	Paper/Air Separation Process #8 (cyclone)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

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 3745-17-11(B)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3) (PTI #03-10834, issued on 2/8/01)	8.0 lbs particulate emissions (PE)/hour
d.	OAC rule 3745-31-05(D) (PTI #03-10834, issued on 2/8/01)	24.9 tons PE/rolling, 12-month period (for emissions units P009, P014, P027, P028, P029, P030 and P031, combined)

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of PE from each 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 because the facility is located in Huron County, which is identified as a P-3 county.

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

c. The 8.0 lbs PE/hour emission limitation was established for PTI purposes to reflect the potential to emit for each emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

(1) The maximum annual production rate for emissions units P009, P014, P027, P028, P029, P030 and P031, combined, shall not exceed 49,800 tons of paper processed, based upon a rolling, 12-month summation of the monthly production rates. Compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the monthly paper production rates.
[OAC rule 3745-77-07(A)(1) and PTI #03-10834]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for emissions units P009, P014, P027, P028, P029, P030 and P031, combined:

a. the production rate (amount of paper baled), in tons;

b. the monthly cumulative paper production rates, in tons;

c. the rolling, 12-month summation of the monthly paper production rates; and

d. the rolling, 12-month summation of the monthly PE rates, in tons [d)(1)c. x 1*/2000]

* This emission factor (1 lb PE/ton of paper shredded and baled) was derived by the permittee based on the results of the emission testing conducted for this emissions unit on July 7, 1999.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify:

a. all exceedances of the rolling, 12-month paper production restriction (for emissions units P009, P014, P027, P028, P029, P030 and P031, combined) of 49,800 tons;

b. all exceedances of the rolling, 12-month PE limitation (for emissions units P009, P014, P027, P028, P029, P030 and P031, combined) of 24.9 tons; and

c. all exceedances of the monthly cumulative paper production rate restrictions.

.[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

f) Testing Requirements

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

a. Emission Limitation:
8.0 pounds PE/hour

Applicable Compliance Method:
Compliance with the hourly limitation may be determined by multiplying the maximum production rate (16,000 pounds of paper/hour) by the emission factor of 1.0 pound PE/ton paper shredded and baled.

If required, the permittee shall demonstrate compliance with the hourly limitation pursuant to Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

b. Emission Limitation:
24.9 tons PE/rolling, 12-month period, from emissions units P009, P014, P027, P028, P029, P030 and P031, combined

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

c. Emission Limitation:
49,800 tons of paper processed, based on 12-month rolling summation of monthly production rates

Applicable Compliance Method
Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

g) Miscellaneous Requirements

(1) None.

14. Emissions Unit Group - Group 8: P021, P022, P023, P024, P025, P026

EU ID	Operations, Property and/or Equipment Description
P021	Book Binding Line #5
P022	Book Binding Line #6
P023	Book Binding Line #7
P024	Book Binding Line #9
P025	Book Binding Line #10
P026	Book Binding Line 48 Box

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

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 3745-21-07(G)	See b)(2)c. and c)(1)
b.	OAC rule 3745-31-05(A)(3) (PTI #03-10834, issued on 2/8/01)	For P021, P022, P023, P024 and P026, 3.55 pounds organic compounds (OC)/hour For P025, 3.91 pounds organic compounds (OC)/hour The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G).
c.	OAC rule 3745-31-05(D) (PTI #03-10834, issued on 2/8/01)	31.8 tons OC/rolling, 12-month period (for emissions units P021, P022, P023, P024, P025 and P026, combined)

(2) Additional Terms and Conditions

a. For P021, P022, P023, P024 and P026, the 3.55 pounds OC/hour emission limitation was established for PTI purposes to reflect the potential to emit for each emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

b. For P025 the 3.91 pounds OC/hour emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

c. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: c)(1), d)(4)b. and e)(1).

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: None.

c) Operational Restrictions

(1) The permittee shall not employ any material in any emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
[OAC rule 3745-77-07(A)(1) and PTI #03-10834]

(2) The maximum annual isopropyl alcohol usage (input) rate for emissions units P021, P022, P023, P024, P025 and P026, combined, shall not exceed 9,710 gallons (31.8 tons of OC), based upon a rolling, 12-month summation of the monthly input rates.
[OAC rule 3745-77-07(A)(1) and PTI #03-10834]

d) Monitoring and/or Recordkeeping Requirements

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

Pollutant: isopropyl alcohol
TLV (ug/m3): 980,000
Maximum Hourly Emission Rate (lbs/hr): 21.7*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,279
MAGLC (ug/m3): 23,333

*It was assumed that all isopropyl alcohol emissions from emissions units P021, P022, P023, P024, P025 and P026, combined, were emitted from one stack.
[OAC rule 3745-77-07(C)(1)]

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

a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
[PTI #03-10834]

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
[PTI #03-10834]

(4) The permittee shall maintain monthly records of the following information for emissions units P021, P022, P023, P024, P025 and P026, combined:

a. the company identification of each organic liquid material employed;

b. documentation on whether or not each organic liquid material employed is a photochemically reactive material;

c. the total isopropyl alcohol input rate, in gallons;

d. the calculated OC emission rate, in pounds [d)(4)c. x 6.55];

e. the total monthly cumulative isopropyl alcohol input rates, in gallons, and the total monthly cumulative OC emission rates, in tons; and

f. the rolling, 12-month summations of the monthly isopropyl alcohol input rates, in gallons, and of the monthly OC emission rates, in tons.

* density of isopropyl alcohol is 6.55 lbs/gallon
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

e) Reporting Requirements

(1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying liquid organic materials (i.e., photochemically reactive materials) in any emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the date of the daily record indicating noncompliance.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

(2) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that identify the following:

a. all exceedances of the rolling, 12-month isopropyl alcohol input rate restriction of 9,710 gallons and of the OC emission limitation of 31.8 tons.

[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

f) Testing Requirements

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

a. Emission Limitation:
9710 gallons of isopropyl alcohol/rolling, 12-month period

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in d)(4) of the terms and conditions of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

b. Emission Limitation:
31.8 tons OC/rolling, 12-month period

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in d)(4) of the terms and conditions of this permit.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

c. Emission Limitation:
3.55 pounds OC/hour for P021, P022, P023, P024 and P026

Applicable Compliance Method:
Compliance may be determined by multiplying the maximum material usage rate (gallons/hour) by the density of isopropyl alcohol (6.55 pounds OC/gallon).

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with Method 25 or 25A of 40 CFR, Part 60, Appendix A.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

d. Emission Limitation:
3.91 pounds OC/hour for P025

Applicable Compliance Method:
Compliance may be determined by multiplying the maximum material usage rate (gallons/hour) by the density of isopropyl alcohol (6.55 pounds OC/gallon).

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with Method 25 or 25A of 40 CFR, Part 60, Appendix A.
[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

g) Miscellaneous Requirements

(1) None.