Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

2/26/2016

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: R. R. Donnelley & Sons Company
Facility ID: 0339030135
Permit Type: Renewal
Permit Number: P0118121

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA DAPC, Northwest District Office

PROPOSED

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

Facility ID:	0339030135
Permit Number:	P0118121
Permit Type:	Renewal
Issued:	2/26/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

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

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance 6
4. Risk Management Plans 7
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 9
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 12
17. Off-Permit Changes 12
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 13
20. Permit to Install Requirement 13
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
30. Submitting Documents Required by this Permit 16
B. Facility-Wide Terms and Conditions 17
C. Emissions Unit Terms and Conditions 20
1. K006, Press 323 21
2. K007, Press 324 32
3. K018, Press 327 43
4. K021, Press 343 54
5. K027, Press 381 61
6. K030, Press 360 72
7. P015, Paper Separation Process #7 (cyclone) 82
8. P037, Binding Line #600 85
9. Emissions Unit Group -1: B001,B004, ... 89
10. Emissions Unit Group -2: K002, K003, K004 96
11. Emissions Unit Group -3: K009, K010, K011, K012 98
12. Emissions Unit Group -4: K024, K025: K024,K025, ... 109
13. Emissions Unit Group -5: P009, P014, P027, P028, P029, P030, P031 121
14. Emissions Unit Group -6: P021,P022,P023,P024,P025,P026, ... 125
15. Emissions Unit Group - 7: K028, K029 130

Authorization

Facility ID:	0339030135
Facility Description:	Book Manufacturing Facility.
Application Number(s):	A0052070, A0054512
Permit Number:	P0118121
Permit Description:	Title V Renewal permit for a book manufacturing facility.
Permit Type:	Renewal
Issue Date:	2/26/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0087290

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 Environmental Protection Agency (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 and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
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 For State-Only Requirements

(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

(5) Standard Term and Condition A. 30.

(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 recordingsfor 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 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) 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 submittedscheduled maintenancerequests, 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 submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted 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 to the Ohio EPA DAPC, Northwest District Office 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with 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 contaminant 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

Officialthat, 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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office) 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 on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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 Federal Register 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 is subject to 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.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified 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 operating 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 RequirementsUnder 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 theOhio EPA DAPC, Northwest District Office.

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 Ohio EPA DAPC, Northwest District Office. 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 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 RequirementsUnder 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 For State-Only Requirements

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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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 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 potential to emit; or

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

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

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) None.

2. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for emissions units K006, K007, K009, K010, K011, K012, K018, K024, K025, K027, K028, K029, at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [Authority for term: 40 CFR Part 64]

3. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions 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, and/or 40 CFR Part 60 or 63:

   a) B003, Natural gas fired Steam Boiler #3 (5.23 mmBtu/hr)
   b) B005, Natural gas fired Steam Boiler #4 (5.23 mmBtu/hr)
   c) G001, Diesel, Gasoline & Kerosene Dispensing Facility
   d) P035, 390 hp Diesel emergency backup generator (PBR07383)
   e) P036, 183 hp Diesel firefighting pump (PBR07383)

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

4. The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart DDDDD. The final rules found in 40 CFR Part 63, Subpart DDDDD establish national emission standards for hazardous air pollutants (NESHAP), operational limits, work practice standards, and compliance requirements for industrial, commercial, and institutional boilers located at a major source of hazardous air pollutants (HAP). The permittee shall comply with the requirements and limits of this NESHAP for the facility's new (commenced construction after 6/4/10) boilers by January 31, 2013, or upon startup, whichever is later; and the facility's existing boilers shall be in compliance with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016.

   The following boilers are designed to only burn gas 1 fuels (subcategory), are less than 10 mmBtu/hr and therefore are not subject to the emission limits in Table 1 or 2 of the subpart or the operating limits in Table 4 to the subpart. However, the boilers are subject to tune-ups requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 #2 to the subpart; and the existing boilers must be included in the one-time energy assessment, performed in accordance with Table 3 #4 of the subpart:

EU ID	Operations, Property and/or Equipment Description
B003	Natural gas fired Steam Boiler #3 (5.23 mmBtu/hr)
B005	Natural gas fired Steam Boiler #4 (5.23 mmBtu/hr)

[OAC rule 3745-77-07(A)(13) and 40 CFR Part 63 Subpart DDDDD]

5. The existing emergency compression ignition (CI) reciprocating internal combustion engine (RICE), located at a major source for Hazardous Air Pollutants (HAPs), is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ.

The following existing stationary CI RICE shall meet the requirements of 63, Subpart ZZZZ:

EU ID	Operations, Property and/or Equipment Description
P035	390 hp Diesel emergency backup generator
P036	183 hp Diesel firefighting pump

The RICE must meet the definition of an emergency stationary RICE in section 63.6675, which includes operating according to the provisions specified in section 63.6640(f), and the permittee shall meet the following requirements contained in 40 CFR, Part 63, Subpart ZZZZ:

66.6605(a) & (b)	General Compliance
63.6603(a), 63.6625(e), (f), (h), and (i)	Monitoring, Installation, Collection, Operation, & Maintenance
66.6640 (a),and (f)	Continuous Compliance
63.6655(d), (e) &(f) & 63.6660(a), (b), and (c)	Recordkeeping
66.6640(b) and (e)	Reporting
66.6665	Table 8 General Provisions

[OAC rule 3745-77-07(A)(13) and 40 CFR Part 63, Subpart ZZZZ]

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 operation(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 are identified below. 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) (PTI# P0104538 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 3745-17-11(B)	See b)(2)f.
d.	OAC rule 3745-17-07(A)	See b)(2)g.
e.	OAC rule 3745-21-07(M)	See b)(2)h.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

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

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# 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)d. below.

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

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

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heat-set mode, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# 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. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

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);

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI# 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 PTI# 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.

g. [OAC rule 3745-77-07(C)(1)] and PTI# 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports 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. allexeedances of the rolling, 12-month OC emission limitation of 32.5 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

a. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# 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 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

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

<u>Applicable Compliance Method:</u>

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 PTI# P0104538]

b. <u>Emission Limitation:</u>

32.5 tons OC/rolling 12-month period

<u>Applicable Compliance Method:</u>

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 PTI# P0104538]

c. <u>Emission Limitation:</u>

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 PTI# 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.

[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 operation(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 are identified below. 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) (PTI# P0104538 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(M)	See b)(2)h.
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

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

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

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

(2) The maximum rolling 12-month usage rate of OC containing materials for this emission unit 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)d. below.

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

[OAC rule 3745-77-07(A)(1) and PTI# 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 more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# 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. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

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)

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI# 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 PTI# 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 PTI# 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

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. allexeedances of the rolling, 12-month OC emission limitation of 29.5tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# 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 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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

<u>Applicable Compliance Method:</u>

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 PTI# P0104538]

b. Emission Limitation:

29.5 tons OC/rolling 12-month period

<u>Applicable Compliance Method:</u>

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 PTI# 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 PTI# 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.

[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 operation(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 are identified below. 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) (PTI# P0104538 on 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) (PTI# P0104538 on issued 6/11/09)	37.0 tons OC/rolling 12-month period for emission unit K018 See b)(2)c.
c.	OAC rule 3745-21-07(M)	See b)(2)h.
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

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

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# 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)d. below.

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

[OAC rule 3745-77-07(A)(1) and PTI# 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 more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# 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. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

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)

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI# 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 PTI# 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 PTI# 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

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

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

g. allexeedances of the rolling, 12-month emission limitation of 37.0 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# 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 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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

b. 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 PTI# P0104538]

c. Emission Limitation:

37.0 tons OC/rolling, 12-month period

d. 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 PTI# P0104538]

e. 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 PTI# 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 units 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.
[PTI# P0104538]

4. K021, Press 343

Operations, Property and/or Equipment Description:

Sheetfed non-heatset UV printing press (press 343)

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 operation(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 are identified below. 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(M)	See b)(2)e.
b.	OAC rule 3745-31-05(D) (PTI# 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# 03-13376 issued on 10/29/02)	See b)(2)a. and b)(2)c. 5.37pounds 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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) 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]

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

$$\sum_{M}^{12}\sum_{n}(U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\} \leq 13.4$$

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)d. 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 this emissions unit:

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

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

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

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

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

e. Where:

f. 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.

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

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

h. Where:

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

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

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

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

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

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

m. Where:

n. 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. allexeedances of the rolling, 12-month OC emission limitation of 13.4.

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions 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]

c. 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)]

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 operation(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 are identified below. 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) (PTI# P0105541 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) (PTI# P015541 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(M)	See b)(2)g.
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

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

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# P0105541]

(2) The maximum 12-month usage rate of OC containing materials for this emission unit 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)d. below.

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

[OAC rule 3745-77-07(A)(1) and PTI# P0105541]

(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 more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# P0105541]

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

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

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)

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C) and PTI# P0105541]

(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 PTI# P0105541]

(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 PTI# P0105541]

(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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0105541]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0105541]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports 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. allexeedances of the rolling, 12-nonth OC emission limitation of 14.0 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0105541]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0105541]

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 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

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

<u>Applicable Compliance Method:</u>

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 PTI# P0105541]

b. <u>Emission Limitation:</u>

14.0 tons OC/12-month period

<u>Applicable Compliance Method:</u>

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 PTI# P0105541]

c. <u>Emission Limitation:</u>

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 PTI# P0105541]

g) Miscellaneous Requirements

(1) None.

6. K030, Press 360

Operations, Property and/or Equipment Description:

Web Offset Lithographic Printing Press using UV-curable inks.

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) b)(1)f., d)(2), d)(3), d)(4), d)(5) and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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(D) (PTI# P0114958 issued 8/6/2013)	3.25 lbs volatile organic compounds (VOC)/hr (as a monthly average); 8.14 tons VOC per rolling, 12-month period See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-11(B)	See b)(2)d.
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(2) through d)(5) and e)(2)
g.	OAC rule 3745-21-07(M)	See b)(2)f.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable limitations for purposes of avoiding Prevention of Significant Deterioration (PSD) permitting requirements. The federally enforceable limitations are based on operational restrictions in c)(1), c)(2) and c)(3):

i. 3.25 lbs VOC/hr, as a monthly average; and

ii. 8.14 tons VOC per rolling, 12-month period

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit for VOC. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D), therefore, the permittee has satisfied the BAT requirements pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (SB 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than 10 tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by the U.S. EPA.

c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the VOC emissions since the potential to emit is less than 10 tons per year, taking into consideration the federally enforceable requirements under OAC rule 3745-31-05(D).

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

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

f. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

a. Ink: 0.45 pound VOC /pound of ink, as applied;

b. Fountain solution: 0.89 pound VOC /gallon of fountain solution material, as applied; and

c. Cleanup materials (auto and hand blanket wash): 7.5 pounds VOC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

(2) The maximum rolling 12-month usage rate of VOC containing materials for emissions units K030 is limited by the following equation:

$$\sum_{M=1}^{12} \sum_{n} \left[(U_n)(V_n)(1 - R_n/100)(1 - (C_n/100)(K/100)) \right] \leq 8.14$$

Where:

M = the increment of the rolling 12-month period; and,

n = the increment of the VOC containing material used during the period

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

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

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

(3) The hourly VOC emission limitation for the offset operations for this 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.

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

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 K030:

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

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

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

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

Where:

E_n= VOC emissions from an individual material (tons VOC emitted/month)

U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);

V_n= Average VOC content of material as determined by Method 24 (lb VOC/lb material)

R_n= Amount of VOC retained on the web or on cloths (tons VOC retained/100 tons VOC used):

R_n = 95 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 VOC captured/100 tons VOC into dryer). For K030, 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 VOC controlled/100 tons VOC into thermal oxidizer). For K030, K = 0 as there is no emissions control equipment employed for this operation.

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

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

Where:

E_M =Monthly VOC emissions, in tons/month; and,

E_n =VOC emissions from each individual graphic arts material.

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

g. the average hourly VOC emission rate [d)(1)d. divided by d)(1)e.] multiplied by 2000];

h. the rolling, 12-month VOC emission rate from emissions unit K030, calculated as follows:

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

Where:

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

E_M =Monthly VOC emissions (tons/month)

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

(2) The PTI application for emissions units, K028, K029 and K030, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological

Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Glycol Ether
TLV (mg/m3): 96.7
Maximum Hourly Emission Rate (lbs/hr): 1.49
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1144
MAGLC (ug/m3):2301.49

The permittee, has demonstrated that emissions of glycol, from emissions units K028, K029 and K030, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[PTI# P0114958]

(3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[PTI# P0114958]

(4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[PTI# P0114958]

(5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI# P0114958]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. all exceedances of the VOC emission limitation of 3.25 pounds/hour (as a monthly average), as determined in d)(1);

ii. all exceedances of the monthly average VOC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in c)(1) and c)(3); and

iii. all exceedances of the rolling, 12-month VOC emission limitation of 8.14 tons.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency). These deviation (excursion) reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

(2) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air Contaminate Statute”, ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s); and

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.25 pounds VOC/hour (as a monthly average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly, as a monthly average, VOC emission limitation from emissions unit K030 through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

b. Emission Limitation:

8.14 tons VOC per rolling, 12-month period

Applicable Compliance Method:

The permittee shall demonstrate compliance with t the annual allowable VOC emission limitation through the record keeping required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

c. VOC Content Limitations:

Ink: 0.45 pound VOC /pound of ink, as applied;

Fountain solution: 0.89 pound VOC /gallon of fountain solution material, as applied; and,

Cleanup materials (auto and hand blanket wash): 7.5 pounds VOC/gallon of cleanup material, as applied.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the VOC content limitations above in accordance with the record keeping in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

(2) Any determination of VOC 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 VOC content of coatings/cleanup materials by Reference Method 24 or an equivalent or alternative method.

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

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

g) Miscellaneous Requirements

(1) None.

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

Operations, Property and/or Equipment Description:

9.9 TPH Paper Separation Process Cyclone No. 7

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 operation(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 are identified below. 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)	9.9 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

(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 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.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions 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.

8. P037, Binding Line #600

Operations, Property and/or Equipment Description:

Patent binding line using VOC-free hot-melt adhesive and employing isopropyl alcohol in the process to cool and set the freshly applied adhesive.

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 operation(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 are identified below. 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(D) (PTI# P0114958 issued 8/6/2013)	5.68 lbs volatile organic compounds (VOC)/hr from emissions units P021-P024, P026, P037-P039, combined 31.8 tons VOC per rolling, 12-month period from emissions units P021-P026 and P037-P039, combined See b)(2)a. and b)(2)b.
b.	ORC 3704.03(T)	See b)(2)c.
c.	OAC rule 3745-21-07(M)	See b)(2)d.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable limitations for purposes of avoiding Prevention of Significant Deterioration (PSD) permitting requirements. The federally enforceable limitations are based on operational restrictions in c)(1):

i. 5.68 lbs VOC/hr from emissions units P021-P024, P026, P037-P039, combined; and

ii. 31.8 tons of VOC/rolling, 12-month period from emissions units P021-P026 and P037-P039, combined.

b. The 5.68 lbs VOC/hr emission limitation represents the potential to emit for each emissions unit. Therefore, no monitoring, record keeping or reporting requirements are established to ensure compliance with this emission limitation.

c. In accordance with ORC rule 3704.03(T), Best Available Technology (BAT) for VOC emissions from this emissions unit has been determined to be compliance with OAC rule 3745-31-05(D).

d. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) The maximum annual isopropyl alcohol usage (input) rate for emissions units P021-P026 and P037-P039, combined, shall not exceed 9710 gallons (31.8 tons VOC) per rolling, 12-month period, based upon a rolling, 12-month summation of the monthly input rates.

The permittee has existing records to generate the rolling, 12-month summation of the isopropyl alcohol usage, upon issuance of this permit.

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for emissions units P021-P026 and P037-P039, combined:

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

b. the total isopropyl alcohol input rate, in gallons;

c. the calculated VOC emission rate, in pounds [d)(1)b. x 6.55 lbs VOC/gal*];

d. the total monthly cumulative isopropyl alcohol input rates, in gallons;

e. the total monthly cumulative VOC emission rates, in tons;

f. the rolling, 12-month summation of the monthly isopropyl alcohol input rates, in gallons; and

g. the rolling, 12-month summation of the monthly VOC emission rates, in tons.

*The density of isopropyl alcohol is 6.55 lbs/gal.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month isopropyl alcohol input rate restriction of 9710 gallons; and

b. the VOC emission limitation of 31.8 tons VOC per rolling, 12-month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

9710 gallons isopropyl alcohol per rolling, 12-month period from emissions units P021-P026 and P037-P039, combined

<u>Applicable Compliance Method:</u>

Compliance shall be based upon the record keeping requirements specified in d)(1).

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

b. <u>Emission Limitation:</u>

31.8 tons VOC per rolling, 12-month period from emissions units P021-P026 and P037-P039, combined

<u>Applicable Compliance Method:</u>

Compliance shall be based upon the record keeping requirements specified in d)(1).

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

c. <u>Emission Limitation:</u>

5.68 lbs VOC/hr from emissions units P021-P024, P026, P037-P039, combined

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum material usage rate (gallons/hour) by the density of isopropyl alcohol (6.55 lbs VOC/gal).

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# P0114958]

g) Miscellaneous Requirements

(1) None.

9. Emissions Unit 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 operation(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 are identified below. 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 Part 63 Subpart DDDDD	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 boilers are designed to burn gas 1 fuels (subcategory) and therefore are not subject to the emission limits in Tables 1 and 2, or 11 through 13 of the subpart or the operating limits in Table 4 to the subpart. However, the boiler(s) are subject to tune-ups requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart and must have a one-time energy assessment, performed in accordance with Table 3 #4 of the subpart.

c. The initial tune-up and one-time energy assessment must be completed no later than 1/31/16.

d. The one-time energy assessment must be performed by a qualified energy assessor and must include the following:

i. a visual inspection of the boiler system;

ii. an evaluation of operating characteristics of the boiler systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;

iii. an inventory of major energy use systems consuming energy from affected boilers, which are under the control of the boiler operator;

iv. a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

v. a review of the facility's energy management practices and recommendations for improvements consistent with the definition of energy management practices, if identified;

vi. a list of cost-effective energy conservation measures that are within the permittee's control;

vii. a list of the energy savings potential of the energy conservation measures identified; and

viii. a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping these investments.

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)]

(3) The permittee must have a tune-up and inspection completed annually (no more than 13 months after the previous tune-up and inspection) in accordance with the requirements of 40 CFR 63.7540(a)(10) and Table 3 #3 of Subpart DDDDD.

[OAC rule 3745-77-07(A)(1) and 40 CFR Part 63 Subpart DDDDD]

(4) The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(A)(1) and 40 CFR Part 63 Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the type and quantity of fuel burned in these emissions units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart DDDDD]

(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)]

(4) The permittee shall maintain records of the following information for the boiler(s) in order to meet the record keeping requirements of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and (c), and to demonstrate compliance with the Subpart DDDDD:

a. a copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and all subsequent Notifications of Compliance Status and/or semiannual compliance reports;

b. records of performance test, fuel analysis, or other compliance demonstrations and as required by 63.10(b)(2)(viii);

c. if burning an alternative fuel in a boiler designed to burn gas 1 (subcategory) fuels, i.e., fuels other than natural gas, refinery gas, or gaseous fuels subject to another subpart or part of the CFR, the records of:

i. the total hours per calendar year that the alternative fuel was burned; and

ii. the total hours per calendar year that the boiler operated during periods of gas curtailment or gas supply emergencies.

These records shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart DDDDD]

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)]

(3) The permittee shall submit, to the appropriate Ohio EPA District Office or Local Air Agency, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545, 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and (6), and 40 CFR 63.9(b) through (h):

a. The Notification of Compliance Status must contain the following:

i. A description of the facility boilers including:

(a) identification of the subcategory each boiler is in;

(b) the design heat input capacity of the/each unit;

(c) a description of the add-on controls used on each boiler;

(d) description of the fuel(s) burned,

(e) identification of fuel(s) that were determined to be a non-waste or fuel(s) processed from discarded non-hazardous secondary materials under 40 CFR 241.3; and

(f) the justification for the selection of fuel(s) burned during the compliance demonstration.

b. the following certification(s) of compliance, as applicable, must be signed by a responsible official:

i. certification that the facility has complied with the required initial tune-up in accordance with 40 CFR 63.7540(a)(10)(i) through (vi);

ii. for existing units, certification that the facility has completed a one-time energy assessment performed according to 40 CFR 63.7530(e) and that it is an accurate depiction of the facility at the time of the assessment; and

iii. except for boilers burning natural gas, refinery gas, or other gas 1 fuel, certification that no secondary materials that are solid waste were combusted in any affected unit;

c. if the unit is designed to burn natural gas, refinery gas, or other gas 1 fuels, and there are plans to use an alternative fuel during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the following information:

i. facility name and address;

ii. identification of the affected unit(s);

iii. the reason natural gas or equivalent fuel cannot be used;

iv. the date when the natural gas curtailment was declared or the natural gas supply interruption began;

v. the type of alternative fuel to be used; and

vi. the dates when the alternative fuel use is expected to begin and end.

d. if there are any plans to switch fuels or make a physical change to a boiler, and this fuel switch or change to the boiler may result in the applicability of a different subcategory, notification of the switch must be made at least 30 days prior to the date of the switch or change and this notification must identify:

i. the name of the facility, the location of the source, the boiler(s) that will switch fuels or were physically changed;

ii. the applicable subcategory of the boiler(s) before and after the switch;

iii. the date on which the fuel switch or physical change occurred;

iv. the planned date for the fuel to be switched; and

v. the date of the notice.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart DDDDD]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions 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.

10. Emissions Unit 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:

(2) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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(M)	See b)(2)c.
d.	OAC rule 3745-31-05 (PTI #03-379)	None.

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

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 -3: K009, K010, K011, K012

EU ID	Operations, Property and/or Equipment Description
K009	OSM Press 325 with Thermal Oxidizer No. 2
K010	OMW Press 326 with Thermal Oxidizer No. 2
K011	OSM Press 336 with Thermal Oxidizer No. 2
K012	OSM Press 380 with Thermal Oxidizer No. 3

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 operation(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 are identified below. 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) (PTI# P0104538 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) (PTI# P0104538 issued on 6/11/09)	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(M)	See b)(2) h.
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

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;

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# 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)d. below.

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

[OAC rule 3745-77-07(A)(1) and PTI# 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 more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions units were in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# 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. The OC content of each graphic arts material, in pounds/gallon or pounds/pound for inks, as received;

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$

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)

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI# 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 PTI# 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;

b. 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;

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

d. 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 PTI# 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104538]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer’s recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary

corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports 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.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# 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 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

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

<u>Applicable Compliance Method:</u>

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 PTI# 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 PTI# 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 PTI# 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.

[PTI# P0104538]

12. Emissions Unit Group -4: K024, K025: K024,K025,

EU ID	Operations, Property and/or Equipment Description
K024	Lithographic Printing Press
K025	Heatset web offset lithographic printing 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)(11) and d)(12)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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# P0104805 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) (PTI# P0104805 issued on 4/20/09)	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(M)	See b)(2)h.
d.	OAC rule 3745-17-11(B)	See b)(2)f.
e.	OAC rule 3745-17-07(A)	See b)(2)g.
f.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(10) and e)(2).

(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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

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;

b. Ink: 1.70 pound OC / gallon of ink for nonheatset operations, as applied;

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

d. Cleanup materials (auto and hand blanket wash): 7.5 pounds OC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# P0104805]

(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 x V_n x (1-R_n/100) x {1-(C_n/100) x (K/100)}]

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

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

[OAC rule 3745-77-07(A)(1) and PTI# P0104805]

(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 more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions units were in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# P0104805]

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

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

d. The OC emissions for each graphic arts material employed, in pounds or tons/month, calculated as follows:

$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$

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)

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

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

where:

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

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

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

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

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

[OAC rule 3745-77-07(C)(1) and PTI# P0104805]

(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 PTI# P0104805]

(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 PTI# P0104805]

(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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104805]

(5) 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 (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104805]

(6) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification

may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(11) 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.
[PTI# P0104805]

(12) 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# P0104805]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports 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.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0104805]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104805]

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 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 controlefficiency (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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

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 PTI# P0104805]

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 PTI# P0104805]

c. Emission Limitation:

95% OC control efficiency and 100% OC capture efficiency

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 PTI# P0104805]

g) Miscellaneous Requirements

(1) None.

13. Emissions Unit Group -5: P009, P014, P027, P028, P029, P030, P031

EU ID	Operations, Property and/or Equipment Description
P009	8.0 TPH Paper Separation Process Cyclone No. 4
P014	8.0 TPH Paper Separation Process Cyclone No. 6
P027	8.0 TPH Paper Separation Process Cyclone No. 5
P028	8.0 TPH Paper Separation Process Cyclone No. 1
P029	8.0 TPH Paper Separation Process Cyclone No. 2
P030	8.0 TPH Paper Separation Process Cyclone No. 3
P031	8.0 TPH Paper Separation Process Cyclone No. 8

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 operation(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 are identified below. 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 that identify the following:

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.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions 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 -6: P021,P022,P023,P024,P025,P026,

EU ID	Operations, Property and/or Equipment Description
P021	Solvent Dipping Operation, Book Binding Line No. 5
P022	Solvent Dipping Operation, Book Binding Line No. 6
P023	Solvent Dipping Operation, Book Binding Line No. 7
P024	Solvent Dipping Operation, Book Binding Line No. 9
P025	Solvent Dipping Operation, Book Binding Line No. 10
P026	Solvent Dipping Operation, 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 operation(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 are identified below. 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(M)	See b)(2)c.
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
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. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) 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. the total isopropyl alcohol input rate, in gallons;

c. the calculated OC emission rate, in pounds [d)(4)b. x 6.55];

d. the total monthly cumulative isopropyl alcohol input rates, in gallons, and the total monthly cumulative OC emission rates, in tons; and

e. 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 submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month isopropyl alcohol input rate restriction of 9,710 gallons; and

b. the OC emission limitation of 31.8 tons OC/rolling, 12-month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-10834]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

9710 gallons of isopropyl alcohol/rolling, 12-month period

<u>Applicable Compliance Method:</u>

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. <u>Emission Limitation:</u>

31.8 tons OC/rolling, 12-month period

<u>Applicable Compliance Method:</u>

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. <u>Emission Limitation:</u>

3.55 pounds OC/hour for P021, P022, P023, P024 and P026

<u>Applicable Compliance Method:</u>

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.

15. Emissions Unit Group - 7: K028, K029

EU ID	Operations, Property and/or Equipment Description
K028	Heatset Web Offset Lithographic Printing Press Controlled by regenerative thermal oxidizer System.
K029	Heatset Web Offset Lithographic Printing Press Controlled by regenerative thermal oxidizer System.

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) b)(1)e., d)(9), d)(10), d)(11), d)(12) and e)(3).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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(D) (PTI# P0114958 issued 8/6/2013)	10.04 lbs volatile organic compounds (VOC)/hr (as a monthly average); 25.2 tons VOC per rolling, 12-month period for emissions units K028 and K029, combined See b)(2)a. and b)(2)b.
b.	ORC 3704.03(T)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	See b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(9) through d)(12) and e)(3)
f.	OAC rule 3745-21-07(M)	See b)(2)f.
g.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(2) through d)(8) and e)(2).

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable limitations for purposes of avoiding Prevention of Significant Deterioration (PSD) permitting requirements. The federally enforceable limitations are based on operational restrictions in c)(1), c)(2) and c)(3):

i. 10.04 lbs VOC/hr as a monthly average for K028 and K029, combined; and

ii. 25.2 tons VOC per rolling, 12-month period for K028 and K029, combined.

b. The hourly VOC emission limitation for the offset operations for emissions units K028 and K029, combined, 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 is 0 percent*;

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

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

v. 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

vi. 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) below.

*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. In accordance with ORC rule 3704.03(T), Best Available Technology (BAT) for VOC emissions from this emissions unit has been determined to be compliance with OAC rule 3745-31-05(D).

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

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

f. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

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

a. Ink: 0.45 pound VOC/pound of ink, as applied;

b. Fountain solution: 0.89 pound VOC /gallon of fountain solution material, as applied; and,

c. Cleanup materials (auto and hand blanket wash): 7.5 pounds VOC/gallon of cleanup material, as applied.

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

(2) The maximum rolling 12-month usage rate of VOC containing materials for emissions units K028 and K029, combined is limited by the following equation:

$$\sum_{M=1}^{12} \sum_{n} \left[(U_n)(V_n)(1 - R_n/100)(1 - (C_n/100)(K/100)) \right] \leq 25.2$$

Where:

M = the increment of the rolling 12-month period; and,

n = the increment of the VOC containing material used during the period.

And where all other variables are the same as described in 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 PTI# P0114958]

(3) The average temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation in heat-set mode, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions units were in compliance.

[OAC rule 3745-77-07(A)(1) and PTI# P0114958]

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

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

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

$$E_n = (U_n)(V_n)\left(\frac{1-R_n}{100}\right)\left\{1-\left(\frac{C_n}{100}\right)\left(\frac{K}{100}\right)\right\}$$

Where:

E_n=VOC emissions from an individual material (tons VOC emitted/month);

U_n= Total usage of the individual material - typically ink, fountain solution, and cleaning solvents (tons of material/month);

V_n=Average VOC content of material as determined by Method 24 (lb VOC/lb material);

R_n= Amount of VOC retained on the web or on cloths (tons VOC retained/100 tons VOC 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 VOC captured/100 tons VOC 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

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

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

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

g. the average hourly VOC emission rate [(d)(1)e. divided by d)(1)f.] divided by 2000];

h. the rolling, 12-month VOC emission rate from emissions units K028 and K029, combined, calculated as follows:

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

Where:

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

E_M =Monthly VOC emissions (tons/month).

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

(2) 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104958]

(3) 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)(6); and

b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation in heatset mode.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104958]

(4) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizes controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer’s recommendations. The emissions

unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) Upon detecting an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) The PTI application for emissions units, K028, K029 and K030, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA

guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: Glycol Ether

   TLV (mg/m3): 96.7

   Maximum Hourly Emission Rate (lbs/hr): 1.49

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1144

   MAGLC (ug/m3):2301.49

The permittee, has demonstrated that emissions of glycol, from emissions units K028, K029 and K030, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[PTI# P0114958]

(10) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

e. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

f. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[PTI# P0114958]

(11) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[PTI# P0114958]

(12) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI# P0114958]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the VOC emission limitation of 10.04 pounds hour, as determined in d)(1);

b. all exceedances of the monthly average VOC content restrictions for inks, fountain solutions, blanket wash, and cleanup materials, as determined in c)(1); and

c. all exceedances of the rolling, 12-month VOC emission limitation of 25.2 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation in heatset mode and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI# P0104958]

(3) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s); and

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI# P0114958]

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 prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the 95% VOC destruction efficiency and the 100% VOC capture efficiency for the press dryer.

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 destruction efficiency for VOC 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 destruction efficiency 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 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. 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.

h. 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

10.04 lbs VOC/hr (as a monthly average) for emissions units K028 and K029, combined

<u>Applicable Compliance Method:</u>

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

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

b. <u>Emission Limitation:</u>

25.2 tons VOC per rolling, 12-month period, for emissions unit K028 and K029, combined

<u>Applicable Compliance Method:</u>

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

[OAC rule 3745-77-07(C)(1) and PTI# P0114958]

g) Miscellaneous Requirements

(1) None.