



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

7/30/2009

John Gray
Quebecor World - Lebanon
760 Fujitec Drive
Lebanon, OH 45036

Certified Mail

Facility ID: 1483060318
Permit Number: P0100614
County: Warren

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Initial

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 5/29/2009. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter.

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
Columbus, Ohio 43215

and Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

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

Cc: Hamilton County Dept. of Environmental Services



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

PRELIMINARY PROPOSED

Air Pollution Title V Permit for Quebecor World - Lebanon

Facility ID: 1483060318

Permit Number: P0100614

Permit Type: Initial

Issued: 7/30/2009

Effective: To be entered upon final issuance

Expiration: To be entered upon final issuance



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Title V Permit
for
Quebecor World - Lebanon

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Preliminary Proposed Title V Permit

Permit Number: P0100614

Facility ID: 1483060318

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1483060318

Facility Description: Prints magazines

Application Number(s): A0032352, A0032353

Permit Number: P0100614

Permit Description: Title V permitting action of Heatset Web Offset Printing Presses.

Permit Type: Initial

Issue Date: 7/30/2009

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number:

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

Quebecor World - Lebanon
760 Fujitec Drive
Lebanon, OH 45036

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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 Hamilton County Dept. of Environmental Services. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Preliminary Proposed Title V Permit

Permit Number: P0100614

Facility ID: 1483060318

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c) The permittee shall submit required reports in the following manner:
 - (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:



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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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



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

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

See A.29 below if no deviations occurred during the quarter.

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

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

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

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

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



If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

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

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Hamilton County Dept. of Environmental Services.

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

3. Scheduled Maintenance

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

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

4. Risk Management Plans

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

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))



6. Severability Clause

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

7. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air 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 official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the



Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

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

(2) Compliance certifications shall include the following:

- (a) An identification of each term or condition of this permit that is the basis of the certification.
- (b) The permittee's current compliance status.
- (c) Whether compliance was continuous or intermittent.
- (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
- (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

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

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

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

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



soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

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

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(Authority for term: OAC rule 3745-77-07(I))



18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

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

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

(Authority for term: OAC rule 3745-77-01)



23. Title VI Provisions

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(Authority for term: OAC rule 3745-77-01(H)(11))

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

The permittee shall submit required reports in the following manner:

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

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports



pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

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

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Preliminary Proposed Title V Permit

Permit Number: P0100614

Facility ID: 1483060318

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Preliminary Proposed Title V Permit

Permit Number: P0100614

Facility ID: 1483060318

Effective Date: To be entered upon final issuance

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. The following insignificant emissions units are located at this facility:
 - a) P001-Ink jet printers: and
 - b) P002- Paper trim collection system.

Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.



State of Ohio Environmental Protection Agency
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C. Emissions Unit Terms and Conditions



1. R007, R007 - 635 G

Operations, Property and/or Equipment Description:

8-Unit Goss 3000-32 Heatset Web Offset 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)(15)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 14-05740)	<p>See b)(2)b., b)(2)c., b)(2)e., c)(2), c)(3), c)(4), and c)(5).</p> <p>Dryer and oxidizer emissions combined:</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.1 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>27.11 tons per year (TPY) of total NOx emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>22.77 TPY of total CO emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>0.16 TPY of total SO2 emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Particulate emissions (PE) shall not</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 0.0076 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>0.47 lb/hour of PE from the thermal oxidizer exhausts.</p> <p>2.06 TPY of total PE from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Particulate matter 10 microns and less (PM10) emissions shall not exceed 0.0076 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>0.47 lb/hour of PM10 emissions from the thermal oxidizer exhausts.</p> <p>2.06 TPY of total PM10 emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 74.55 TPY.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-31-05(D), and 3745-21-08(B).</p>
b.	OAC rule 3745-31-05(D)	See b)(2)d, b)(2)g, b)(2)h, and c)(1).
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as specified by rule.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-07(G)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See b)(2)j.</p>
f.	OAC rule 3745-21-08(B)	See b)(2)i.
g.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(3)-d)(12).



(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the operation of a thermal oxidizer with a control efficiency equal to or greater than 95% for VOC emissions, and the emission and usage limitations.

Ink means a liquid material applied by a roll printer. Fountain solution means a surface coating applied to a lithographic plate to render the non image areas unreceptive to ink. Coatings, non-piling additive and adhesive means all materials applied onto or saturated within a substrate for decorative, protective or functional purposes. Metering rolling cleaner and blanket wash means all materials used to remove excess printing inks, oils and paper components from press equipment.

- b. Volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007, shall not exceed 42.04 pounds per hour, combined.
- c. Daily organic compound emissions from each emissions units R001, R002, R003, R004, R006 and R007, combined shall not exceed 1008.96 pounds per day which includes the following limits of 516.72 pounds per day from the oven exhaust and 492.24 pounds per day from the fugitive emissions associated with the fountain solution, blanket wash, non piling additive and metering roller cleaner.
- d. The following volatile organic compound (VOC) contents shall not be exceeded for all emissions units:

i.	Ink	50 percent by wt. VOC;
ii.	Aqueous coatings	14.6 percent by wt. VOC;
iii.	Blanket wash	100 percent by wt. VOC;
iv.	Metering Roller Cleaner	100 percent by wt. VOC;
v.	Fountain solution	15 percent by wt. VOC*;
vi.	Non piling additive	52 percent by wt. VOC

* This limit is for the fountain solution concentrate.

- e. The permittee shall operate and maintain two thermal oxidizers , at a minimum, 95 percent (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhausts for emissions units R001, R002, R003, R004, R006 and R007.
- f. The hourly and daily emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- g. The allowable emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers shall not exceed 9.9 TPY for



any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be determined based upon a rolling, 12-month summation.

- h. The combined volatile annual organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007 shall not exceed 183.59 tons per year based on a rolling 12-month summation. This emission limit is based on usages outlined in c)(1) and the VOC contents in b)(2)d. See f)(1)h. for the specific emission calculations.
- i. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established in PTI No. 14-05740. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- j. The requirement prohibiting the use of photochemically reactive materials established under OAC rule 3745-21-07 shall cease to be effective and federally enforceable on the date the U.S. EPA approves the current rule as a revision to the Ohio SIP for the control of organic compounds.

c) Operational Restrictions

- (1) Coating and cleanup material usages for emissions units R001, R002, R003, R004, R006 and R007 combined shall not exceed the following limits:

	<u>Material Usages (pounds/yr)**</u>
a. Inks	8,711,800
b. Blanket wash	208,400
c. Metering Roller Cleaner	29,400
d. Fountain solution*	350,000
e. Non Piling Additive	59,400
f. Aqueous Coatings	223,400

* This usage limit is for the fountain solution concentrate.

** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.



- (2) The permittee shall employ fountain solutions which have a VOC content, as applied of no more 5.0% by weight since the fountain solution does not contain any restricted alcohols. Restricted alcohols are defined as an alcohol which contains only one hydroxyl(-OH) group and less than 5 carbon atoms.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (3) The vapor pressure of the blanket or roller wash, as applied, shall not exceed 10 mm of Mercury at 68 degrees Fahrenheit. Blanket or roller wash means any cleaning solvent or solution used to remove excess inks, oils and debris from the blanket roller or inking rollers.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (4) The air pressure in the dryer shall be maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

- (5) The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information each month for each emissions unit:
 - a. the company identification of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed in each emissions unit;
 - b. the percent (%) by weight of the volatile organic compound content of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution(concentrate) and non piling additive for each emissions unit;
 - c. the number of pounds of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed in each emissions unit. The amount of material allocated to each emission unit will be based on the number of impressions made at each emissions unit. Example calculations are referenced in term and condition f)(1)h.;
 - d. the total rolling, 12-month summation of the ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive usage in pounds for emissions units R001, R002, R003, R004, R006 and R007, combined;
 - e. the total rolling, 12-month summation of the controlled volatile organic compound (VOC) emissions in tons per year from the inks, aqueous coatings, blanket wash, metering roller cleaner, fountain solution and non piling additive for emissions units R001, R002, R003, R004, R006 and R007, combined;



- f. all materials employed by the permittee shall be recorded and reported as applied except for the fountain solution and the non-piling additive, which shall be recorded and reported as concentrate;
- g. the vapor pressure in mm of Mercury for each blanket and roller wash; and
- h. a record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

[Authority for term: OAC 3745-31-05(D) and 3745-77-07(C)(1)]

- (2) The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers:
 - a. the name and identification number of each ink, aqueous coating, blanket wash (cleanup), metering roller cleaner, fountain solution and non piling additive;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive in pounds of individual HAP per pound of material;
 - c. the total combined HAP content of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive in pounds of combined HAPs per pound of material [sum all the individual HAP contents from (b)];
 - d. the number of pounds of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed;
 - e. the total individual HAP emissions for each HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons per month [for each HAP the sum of (b) times (d)];
 - f. the total combined HAP emissions from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons per month [the sum of (c) times (d)];
 - g. the updated rolling, 12-month summation of the individual HAP emissions for each HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons;
 - h. the updated rolling, 12-month summation of the combined HAP emissions for all HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons; and
 - i. all materials employed by the permittee shall be recorded and reported as applied except for the fountain solution and the non-piling additive, which shall be recorded and reported as concentrate.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. This information does not have to be kept on a line-by-line basis.



[Authority for term: OAC 3745-31-05(D) and 77-07(C)(1)]

- (3) The CAM plan for monitoring the control efficiency for the thermal oxidizer controlling this emission is based on measuring the temperature within the combustion chamber of the thermal oxidizer. The indicator range was set at a value such that the 3-hour average temperature within the combustion chamber of the thermal oxidizer shall not be more than 50 degrees Fahrenheit below 1600 degrees Fahrenheit.

Acceptable values for the temperature of the combustion chamber of the thermal oxidizer are those values that fall within the indicator range specified above.

The indicator range noted above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by Ohio EPA. The permittee may request revisions to the ranges above based upon information obtained during future emission tests that demonstrate compliance with the control efficiency for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3), and 3745-77-07(C)(1)]

- (4) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
 - a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

Upon detecting an excursion of the thermal oxidizer temperature indicator range listed in d)(3), the owner or operator shall restore operation of the emissions unit (including the control device) 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 an excursion.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3),and 3745-77-07(C)(1)]



- (5) Whenever the monitored values for the average temperature within the combustion chamber of the thermal oxidizer deviate from the indicator range specified in d)(3), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began and ended;
 - b. the magnitude of the deviation;
 - c. the date(s) the investigation was conducted;
 - d. the names of the personnel who conducted the investigation; and
 - e. the findings and recommendations of the investigation.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3), and 3745-77-07(A)(1)]

- (6) In response to each required investigation required in d)(5) to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the indicator range specified in d)(3). The permittee shall maintain records of the following information for each corrective action taken:
- a. a description of the corrective action;
 - b. the date and time the corrective action was completed; and
 - c. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: 40 CFR Part 64 CAM and 3745-77-07(C)(1)]

- (7) If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (8) The CAM plan for monitoring the capture efficiency of the control equipment for this emissions unit has been developed for the monitoring of the static pressure measured at the inlet plenum to the thermal oxidizer. The indicator range was set at a value such that the 3-hour average static pressure measured at the inlet plenum to the thermal oxidizer shall be maintained at a value at least - 0.25 inches of water. Acceptable values for static pressure measured at the inlet plenum to the thermal oxidizer are those values that fall below the negative pressure indicator range specified above.

The indicator range noted above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by Ohio EPA. The permittee may request revisions to the ranges above based upon information obtained during



future emission tests that demonstrate compliance with the control efficiency for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (9) The permittee shall properly install, operate, and maintain equipment to monitor and record the static pressure at the inlet plenum to the thermal oxidizer while the emissions unit is in operation. Units shall be in inches of water. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average static pressure measured at the inlet plenum to the thermal oxidizer was greater than -0.25 inches of water; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring and recording equipment, and the associated emissions unit(s).

Upon detecting an excursion of the thermal oxidizer static pressure indicator range listed in d)(8), the owner or operator shall restore operation of the emissions unit (including the control device) 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 an excursion.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (10) Whenever the monitored values for the average static pressure measured at the inlet plenum to the thermal oxidizer deviate from the indicator range specified in d)(8), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began and ended;
 - b. the magnitude of the deviation;
 - c. the date(s) the investigation was conducted;
 - d. the names of the personnel who conducted the investigation; and
 - e. the findings and recommendations of the investigation.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (11) In response to each required investigation required in d)(10) to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of



the control equipment within the indicator range specified in d)(8). The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date and time the corrective action was completed; and
- c. the names of the personnel who performed the work.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (12) Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (13) The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make Reporting Requirements available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.

[Authority for term: OAC rules 31-05(A)(3) and 77-07(C)(1)]

- (14) Pursuant to OAC rule 77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent than as or more stringent than the monitoring and recordkeeping requirements contained in Permit to Install # 14-05740, issued on November 25, 2005: d)(1) - d)(13). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

- (15) Modeling to demonstrate compliance with, the AToxic Air Contaminant Statute~~e~~, 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.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which identify any exceedance of the HAP emission limitations in b)(2)g. If no exceedances occurred during the reporting period then a report is required stating so.

[Authority for term: OAC 3745-31-05(D) and 77-07(A)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):

- 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 range specified in d)(3);
- b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
- c. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
- d. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) 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. an identification of 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).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

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

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the static pressure at the inlet plenum to the thermal oxidizer was outside of the range specified in d)(8);



- b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
- c. an identification of each incident of deviation described in e)(3)a. or e)(3)b. (above) where a prompt investigation was not conducted;
- d. an identification of each incident of deviation described in e)(3)a. or e)(3)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the static pressure at the inlet plenum to the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. an identification of each incident of deviation described in e)(3)a. or e)(3)b. where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

(Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(A)(1))

- (4) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each month from emissions units R001, R002, R003, R004, R006 and R007 combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.

[Authority for term: OAC rules 3745-31-05(D) and 77-07(C)(1)]

- (5) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in pounds from the inks, aqueous coatings, blanket wash (cleanup), metering roller cleaner, fountain solution and non piling additives for emissions units R001, R002, R003, R004, R006 and R007, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

[Authority for term: OAC rules 3745-31-05(D) and 77-07(C)(1)]

- (6) The permittee shall submit quarterly deviation reports which identify all exceedances of the VOC content limitations in b)(2)d. and c)(2).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (7) The permittee shall submit deviation reports which identify all exceedances of the vapor pressure limitation outlined in c)(3).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (8) The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as



defined in OAC rule 3745-21-01(C)(5)] was employed. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (9) Pursuant to OAC rule 3745-77-03(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 14-05740, issued on November 25, 2008: e)(1) - e)(8). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

- a. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the inks, fountain solutions, coatings, metering rolling cleaner, non-piling additive, and blanket wash. If pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or Method 24A cannot be used, the permittee shall notify the Administrator of USEPA and shall use formulation data for the material to demonstrate compliance until USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Authority for term: OAC 3745-31-05(A)(3), 3745-21-10(B), and 3745-77-07(A)(1)]

- b. Emission Limitations:

Volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007, shall not exceed 42.04 pounds per hour, combined.

The permittee shall operate and maintain two thermal oxidizers, at a minimum, 95 percent (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhausts for emissions units R001, R002, R003, R004, R006 and R007.

Applicable Compliance Methods:

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

The emission testing shall be conducted 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOCs specified above for VOC. Both thermal oxidizers shall be tested to determine the mass emission rate. The following test



method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 25 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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.

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

The permittee shall record the temperature within the combustion chamber of the thermal oxidizer and the static pressure at the inlet plenum to the thermal oxidizer during each testing run. At a minimum the temperature and static pressure shall be recorded at 15 minute intervals.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

c. Emission Limitations:

Volatile organic compound (VOC) emissions shall not exceed 74.55 TPY.

The combined annual organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007 shall not exceed 183.59 tons per year based on a rolling 12-month summation.



Applicable Compliance Methods:

The VOC emissions are calculated by multiplying the percent (%) by weight VOC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

Ink emissions

For ink, 20.0% of the VOC's in heatset inks are retained by the substrate, 80.0% goes to the dryer. In addition, there is a 100.0% capture efficiency and a 95.0% control efficiency. All are demonstrated in the following equation:

$$50\% \text{ weight VOC content} * \text{material usage rate (tons)} * (1.0-0.20)*(1.0-0.95) = \text{tons of VOC.}$$

Fountain solution emissions

For fountain solution, there is a 70.0% capture efficiency by the control system and a 95.0% control efficiency as demonstrated in the following equations:

Stack Emissions

$$15\% \text{ Weight VOC content} * \text{material usage rate (tons)} * (0.70) * (1.0 - 0.95) = \text{tons of VOC; and}$$

Fugitive Emissions

$$15\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.30) = \text{tons of VOC.}$$

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for fountain solution.

Aqueous Coatings emissions

For aqueous coatings, there is a 100.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equation:

$$14.6\% \text{ weight VOC content} * \text{material usage rate (tons)} * (1.0-0.95) = \text{tons of VOC.}$$

Metering Rolling Cleaner emissions

For Metering Rolling Cleaner, 100.0% is fugitive emissions as demonstrated in the following equation:

$$100\% \text{ weight VOC content} * \text{material usage rate (tons)} = \text{tons of VOC.}$$

Non-piling additive emissions

For non-piling additive, there is a 70.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equation:

Stack Emissions



52% weight VOC content * material usage rate (tons) * (0.70) * (1.0 - 0.95) = tons of VOC.

Fugitive Emissions

52% weight VOC content * material usage rate (tons)* (0.30) = tons of VOC.

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for non-piling additive.

Auto Blanket Wash emissions

For Auto Blanket Wash, there is a 40.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equations:

Stack Emissions

100% weight VOC content * material usage rate (tons)* (0.40) * (1.0 - 0.95) = tons of VOC.

Fugitive Emissions

100% weight VOC content * material usage rate (tons)*(0.60) = tons of VOC.

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for auto blanket wash.

Manual Blanket Wash emissions

For Manual Blanket Wash, 50.0% of the VOC's are retained by rags, while 50.0% is fugitive emissions as demonstrated in the following equations:

Fugitive Emissions

100% weight VOC content * material usage rate (tons)*(0.50) = tons of VOC.

Add the auto blanket wash emissions to the manual blanket wash emissions to obtain the total VOC emissions for blanket wash.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as specified by rule

Applicable Compliance Method

Compliance with the visible particulate emissions limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1)(a) and 77-07(A)(1)]



e. Emission Limitations:

The allowable emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be determined based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the HAP emission limitations shall be demonstrated by the information collected and recorded in d)(2).

[Authority for term: OAC rules 3745-31-05(D) and 77-07(A)(1)]

f. Compliance with the percent by weight VOC content limitations specified in b)(2)d. and the usage limitations specified in c)(1) shall be demonstrated by the information collected and recorded in d)(1).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

g. Emission Limitations:

Dryer and thermal oxidizer emissions, R001-R007, combined:

Nitrogen oxides (NO_x) emissions shall not exceed 0.1 lb/mmBtu; 27.11 TPY of total NO_x emissions;

Carbon monoxide (CO) emissions shall not exceed 0.084 lb/mmBtu; 22.77 TPY of total CO emissions;

Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 lb/mmBtu; 0.16 TPY of total SO₂ emissions;

Particulate emissions (PE) shall not exceed 0.0076 lb/mmBtu; 0.47 lb/hour of PE from the thermal oxidizer exhausts; 2.06 TPY of total PE;

Particulate matter 10 microns and less (PM₁₀) emissions shall not exceed 0.0076 lb/mmBtu; 0.47 lb/hour of PM₁₀ emissions from the thermal oxidizer exhausts; 2.06 TPY of total PM₁₀ emissions.

Applicable Compliance Methods:

Compliance with the NO_x, CO, SO₂, PE and PM₁₀ emission limits in b)(1) shall be determined by multiplying the fuel usage by the AP-42 emission factor taken from USEPA's AP-42, 5th Edition, Tables 1.4-1 and 1.4-2 dated 7/98.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

h. Compliance with the recordkeeping requirement of keeping monthly usage records for each emissions unit specified in (b)(2)h. shall be determined by the following example calculation:



$$Q (R00x) = Q \text{ total} \times [I (R001)/I (\text{sum of } R001- R004, R006, R007)]$$

Where:

Q (R00x) = the ink consumed by emission unit R00x for the month.

Q (total) = the total ink used by the permittee for the month.

I (R00x) = the total impressions for emissions unit R00x for the month.

I (sum of R001-R004, R006, and R007) = the total impressions for emissions units R001, R002, R003, R004, R006 and R007 for the month.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- i. Compliance with the vapor pressure limitation in c)(3) shall be demonstrated by the record keeping in d)(1).
- j. Emission Limitation

Daily organic compound emissions from each emissions units R001, R002, R003, R004, R006 and R007, combined shall not exceed 1008.96 pounds per day which includes the following limits of 516.72 pounds per day from the oven exhaust and 492.24 pounds per day from the fugitive emissions associated with the fountain solution, blanket wash, non piling additive and metering roller cleaner.

Applicable Compliance Methods:

The daily OC emission limitations is based on the potentially hourly emission limitation multiplied by 24 hours per day.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install # 14-05740, issued on November 25, 2008: f)(1)a – f)(1)(j). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) Permit to Install 14-05281 had a VOC tons per year allowable of 83.85. This permitting action (Part 70 Title V Operating Permit) has an assigned VOC tons per year allowable of 183.59. Hence, a difference of (183.59-83.85) 99.74 which is below major stationary source threshold levels for non-attainment review and therefore would not trigger non-attainment review for this amount of increase over previous permitted allowables.



2. Emissions Unit Group - R001-R004, R006: R001, R002, R003, R004, R006,

EU ID	Operations, Property and/or Equipment Description
R001	8-Unit Harris 838B M-1000 Series Heatset Web Offset Printing Press
R002	8-Unit Harris 838C M-1000 Series Heatset Web Offset Printing Press
R003	8-Unit Harris 838D M-1000 Series Heatset Web Offset Printing Press
R004	8-Unit Harris 838E M-1000 Series Heatset Web Offset Printing Press
R006	6-Unit Harris 838F M-110C Series Heatset Web Offset 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)(15)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 14-05740)	See b)(2)b., b)(2)c., b)(2)e., c)(2), c)(3), c)(4), and c)(5). Dryer and oxidizer emissions combined: Nitrogen oxides (NOx) emissions shall not exceed 0.1 lb/MMBtu from the thermal oxidizers and dryers. 27.11 tons per year (TPY) of total NOx emissions from emissions units R001, R002, R003, R004, R006 and R007 combined. Carbon monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu from the thermal oxidizers and dryers. 22.77 TPY of total CO emissions from emissions units R001, R002, R003, R004, R006 and R007 combined. Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/MMBtu from the thermal oxidizers and dryers.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>0.16 TPY of total SO₂ emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Particulate emissions (PE) shall not exceed 0.0076 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>0.47 lb/hour of PE from the thermal oxidizer exhausts.</p> <p>2.06 TPY of total PE from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Particulate matter 10 microns and less (PM₁₀) emissions shall not exceed 0.0076 lb/MMBtu from the thermal oxidizers and dryers.</p> <p>0.47 lb/hour of PM₁₀ emissions from the thermal oxidizer exhausts.</p> <p>2.06 TPY of total PM₁₀ emissions from emissions units R001, R002, R003, R004, R006 and R007 combined.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 49.03 TPY.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-31-05(D), and 3745-21-08(B).</p>
b.	OAC rule 3745-31-05(C)	See b)(2)d., b)(2)g., b)(2)h., and c)(1).
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as specified by rule.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-07(G)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See b)(2)j.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-21-08(B)	See b)(2)i.
g.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(3) - d)(12).

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the operation of a thermal oxidizer with a control efficiency equal to or greater than 95% for VOC emissions, and the emission and usage limitations.

Ink means a liquid material applied by a roll printer. Fountain solution means a surface coating applied to a lithographic plate to render the non image areas unreceptive to ink. Coatings, non-piling additive and adhesive means all materials applied onto or saturated within a substrate for decorative, protective or functional purposes. Metering rolling cleaner and blanket wash means all materials used to remove excess printing inks, oils and paper components from press equipment.

- b. Volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007, shall not exceed 42.04 pounds per hour, combined.
- c. Daily organic compound emissions from each emissions units R001, R002, R003, R004, R006 and R007, combined shall not exceed 1008.96 pounds per day which includes the following limits of 516.72 pounds per day from the oven exhaust and 492.24 pounds per day from the fugitive emissions associated with the fountain solution, blanket wash, non piling additive and metering roller cleaner.
- d. The following volatile organic compound (VOC) contents shall not be exceeded for all emissions units:
 - i. Ink 50 percent by wt. VOC;
 - ii. Aqueous coatings 14.6 percent by wt. VOC;
 - iii. Blanket wash 100 percent by wt. VOC;
 - iv. Metering Roller Cleaner 100 percent by wt. VOC;
 - v. Fountain solution 15 percent by wt. VOC*;
 - vi. Non piling additive 52 percent by wt. VOC

* This limit is for the fountain solution concentrate.

- e. The permittee shall operate and maintain two thermal oxidizers, at a minimum, 95 percent (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhausts for emissions units R001, R002, R003, R004, R006 and R007.



- f. The hourly and daily emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- g. The allowable emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be determined based upon a rolling, 12-month summation.
- h. The combined annual volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007 shall not exceed 183.59 tons per year based on a rolling 12-month summation. This emission limit is based on usages outlined in c)(1) and the VOC contents in b)(2)d. See f)(1)h. for the specific emission calculations.
- i. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established in PTI No. 14-05740. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- j. The requirement prohibiting the use of photochemically reactive materials established under OAC rule 3745-21-07 shall cease to be effective and federally enforceable on the date the U.S. EPA approves the current rule as a revision to the Ohio SIP for the control of organic compounds.

c) Operational Restrictions

- (1) Coating and cleanup material usages for emissions units R001, R002, R003, R004, R006 and R007 combined shall not exceed the following limits:

		<u>Material Usages (pounds/yr)**</u>
a.	Inks	8,711,800
b.	Blanket wash	208,400
c.	Metering Roller Cleaner	29,400
d.	Fountain solution*	350,000
e.	Non Piling Additive	59,400



f. Aqueous Coatings 223,400.

* This usage limit is for the fountain solution concentrate.

** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.

[Authority for term: OAC 3745-31-05(D) and 3745-77-07(A)(1)]

(2) The permittee shall employ fountain solutions which have a VOC content, as applied of no more 5.0% by weight since the fountain solution does not contain any restricted alcohols. Restricted alcohols are defined as an alcohol which contains only one hydroxyl(-OH) group and less than 5 carbon atoms.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

(3) The vapor pressure of the blanket or roller wash, as applied, shall not exceed 10 mm of Mercury at 68 degrees Fahrenheit. Blanket or roller wash means any cleaning solvent or solution used to remove excess inks, oils and debris from the blanket roller or inking rollers.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

(4) The air pressure in the dryer shall be maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1)]

(5) The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

[Authority for term: OAC 3745-31-05(A)(3) and 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for each emissions unit:

a. the company identification of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed in each emissions unit;

b. the percent (%) by weight of the volatile organic compound content of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution(concentrate) and non piling additive for each emissions unit;

c. the number of pounds of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed in each emissions unit. The amount of material allocated to each emission unit will be based on the number of impressions made at each emissions unit. Example calculations are referenced in term and condition f)(1)h.;



- d. the total rolling, 12-month summation of the ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive usage in pounds for emissions units R001, R002, R003, R004, R006 and R007, combined;
- e. the total rolling, 12-month summation of the controlled volatile organic compound (VOC) emissions in tons per year from the inks, aqueous coatings, blanket wash, metering roller cleaner, fountain solution and non piling additive for emissions units R001, R002, R003, R004, R006 and R007, combined;
- f. all materials employed by the permittee shall be recorded and reported as applied except for the fountain solution and the non-piling additive, which shall be recorded and reported as concentrate;
- g. the vapor pressure in mm of Mercury for each blanket and roller wash; and
- h. a record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

[Authority for term: OAC 3745-31-05(D) and 3745-77-07(C)(1)]

- (2) The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers:
 - a. the name and identification number of each ink, aqueous coating, blanket wash (cleanup), metering roller cleaner, fountain solution and non piling additive;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive in pounds of individual HAP per pound of material;
 - c. the total combined HAP content of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive in pounds of combined HAPs per pound of material [sum all the individual HAP contents from (b)];
 - d. the number of pounds of each ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed;
 - e. the total individual HAP emissions for each HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons per month [for each HAP the sum of (b) times (d)];
 - f. the total combined HAP emissions from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons per month [the sum of (c) times (d)];
 - g. the updated rolling, 12-month summation of the individual HAP emissions for each HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons;



- h. the updated rolling, 12-month summation of the combined HAP emissions for all HAP from all ink, aqueous coating, blanket wash, metering roller cleaner, fountain solution and non piling additive employed, in pounds or tons; and
- i. all materials employed by the permittee shall be recorded and reported as applied except for the fountain solution and the non-piling additive, which shall be recorded and reported as concentrate.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. This information does not have to be kept on a line-by-line basis.

[Authority for term: OAC 3745-31-05(D) and 77-07(C)(1)]

- (3) The CAM plan for monitoring the control efficiency for the thermal oxidizer controlling this emission is based on measuring the temperature within the combustion chamber of the thermal oxidizer. The indicator range was set at a value such that the 3-hour average temperature within the combustion chamber of the thermal oxidizer shall not be more than 50 degrees Fahrenheit below 1600 degrees Fahrenheit.

Acceptable values for the temperature of the combustion chamber of the thermal oxidizer are those values that fall within the indicator range specified above.

The indicator range noted above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by Ohio EPA. The permittee may request revisions to the ranges above based upon information obtained during future emission tests that demonstrate compliance with the control efficiency for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3), and 3745-77-07(C)(1)]

- (4) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
 - a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).



Upon detecting an excursion of the thermal oxidizer temperature indicator range listed in d)(3), the owner or operator shall restore operation of the emissions unit (including the control device) 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 an excursion.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3),and 3745-77-07(C)(1)]

- (5) Whenever the monitored values for the average temperature within the combustion chamber of the thermal oxidizer deviate from the indicator range specified in d) (3), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began and ended;
 - b. the magnitude of the deviation;
 - c. the date(s) the investigation was conducted;
 - d. the names of the personnel who conducted the investigation; and
 - e. the findings and recommendations of the investigation.

[Authority for term: 40 CFR Part 64 CAM, 3745-31-05(A)(3), and 3745-77-07(A)(1)]

- (6) In response to each required investigation required in d)(5) to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the indicator range specified in d)(3). The permittee shall maintain records of the following information for each corrective action taken:
 - a. a description of the corrective action;
 - b. the date and time the corrective action was completed; and
 - c. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: 40 CFR Part 64 CAM and 3745-77-07(C)(1)]

- (7) If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]



- (8) The CAM plan for monitoring the capture efficiency of the control equipment for this emissions unit has been developed for the monitoring of the static pressure measured at the inlet plenum to the thermal oxidizer. The indicator range was set at a value such that the 3-hour average static pressure measured at the inlet plenum to the thermal oxidizer shall be maintained at a value at least -0.25 inches of water. Acceptable values for static pressure measured at the inlet plenum to the thermal oxidizer are those values that fall below the negative pressure indicator range specified above.

The indicator range noted above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by Ohio EPA. The permittee may request revisions to the ranges above based upon information obtained during future emission tests that demonstrate compliance with the control efficiency for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (9) The permittee shall properly install, operate, and maintain equipment to monitor and record the static pressure at the inlet plenum to the thermal oxidizer while the emissions unit is in operation. Units shall be in inches of water. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average static pressure measured at the inlet plenum to the thermal oxidizer was greater than -0.25 inches of water; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring and recording equipment, and the associated emissions unit(s).

Upon detecting an excursion of the thermal oxidizer static pressure indicator range listed in d)(8), the owner or operator shall restore operation of the emissions unit (including the control device) 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 an excursion.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (10) Whenever the monitored values for the average static pressure measured at the inlet plenum to the thermal oxidizer deviate from the indicator range specified in d)(8), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began and ended;



- b. the magnitude of the deviation;
- c. the date(s) the investigation was conducted;
- d. the names of the personnel who conducted the investigation; and
- e. the findings and recommendations of the investigation.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

(11) In response to each required investigation required in d)(10) to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the indicator range specified in d)(8). The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date and time the corrective action was completed; and
- c. the names of the personnel who performed the work.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

(12) Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

(13) The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make Reporting Requirements available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.

[Authority for term: OAC rules 31-05(A)(3) and 77-07(C)(1)]

(14) Pursuant to OAC rule 77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent than as or more stringent than the monitoring and recordkeeping requirements contained in Permit to Install # 14-05740, issued on November 25, 2005: d)(1) - d)(13). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these



requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

- (15) Modeling to demonstrate compliance with, the AToxic Air Contaminant Statute^o, 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.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which identify any exceedance of the HAP emission limitations in term b)(2)g. If no exceedances occurred during the reporting period then a report is required stating so.

[Authority for term: OAC 3745-31-05(D) and 77-07(A)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
- 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 range specified in d)(3);
 - b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
 - c. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) 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. an identification of 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).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.



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

[Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(C)(1)]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the static pressure at the inlet plenum to the thermal oxidizer was outside of the range specified in d)(8);
 - b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
 - c. an identification of each incident of deviation described in e)(3)a. or e)(3)b. (above) where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in e)(3)a. or e)(3)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the static pressure at the inlet plenum to the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. an identification of each incident of deviation described in e)(3)a. or e)(3)b. where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

(Authority for term: 40 CFR Part 64 CAM, and 3745-77-07(A)(1))

- (4) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each month from emissions units R001, R002, R003, R004, R006 and R007 combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.

[Authority for term: OAC rules 3745-31-05(D) and 77-07(C)(1)]

- (5) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in pounds from the inks, aqueous coatings, blanket wash (cleanup), metering roller cleaner, fountain solution and non piling additives for emissions units R001, R002, R003, R004, R006 and R007, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.



[Authority for term: OAC rules 3745-31-05(D) and 77-07(C)(1)]

- (6) The permittee shall submit quarterly deviation reports which identify all exceedances of the VOC content limitations in b)(2)d. and c)(2).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (7) The permittee shall submit deviation reports which identify all exceedances of the vapor pressure limitation outlined in c)(3).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (8) The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] was employed. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(C)(1)]

- (9) Pursuant to OAC rule 3745-77-03(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 14-05740, issued on November 25, 2008: e)(1) - e)(8). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

- a. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the inks, fountain solutions, coatings, metering rolling cleaner, non-piling additive, and blanket wash. If pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or Method 24A cannot be used, the permittee shall notify the Administrator of USEPA and shall use formulation data for the material to demonstrate compliance until USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

[Authority for term: OAC 3745-31-05(A)(3), 3745-21-10(B), and 3745-77-07(A)(1)]

- b. Emission Limitations:

Volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007, shall not exceed 42.04 pounds per hour, combined.

The permittee shall operate and maintain two thermal oxidizers, at a minimum, 95 percent (by weight of organic compounds) control efficiency at maximum



hourly coating capacity from the oven exhausts for emissions units R001, R002, R003, R004, R006 and R007.

Applicable Compliance Methods:

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

The emission testing shall be conducted 6 months prior to permit renewal.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rate for VOCs specified above for VOC. Both thermal oxidizers shall be tested to determine the mass emission rate. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 25 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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.

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

The permittee shall record the temperature within the combustion chamber of the thermal oxidizer and the static pressure at the inlet plenum to the thermal oxidizer during each testing run. At a minimum the temperature and static pressure shall be recorded at 15 minute intervals.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following



completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

c. Emission Limitations:

Volatile organic compound (VOC) emissions shall not exceed 74.55 TPY.

The combined annual volatile organic compound emissions from emissions units R001, R002, R003, R004, R006 and R007 shall not exceed 183.59 tons per year based on a rolling 12-month summation.

Applicable Compliance Methods:

The VOC emissions are calculated by multiplying the percent (%) by weight VOC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

Ink emissions

For ink, 20.0% of the VOC's in heatset inks are retained by the substrate, 80.0% goes to the dryer. In addition, there is a 100.0% capture efficiency and a 95.0% control efficiency. All are demonstrated in the following equation:

$$50\% \text{ weight VOC content} * \text{material usage rate (tons)} * (1.0-0.20)*(1.0-0.95) = \text{tons of VOC.}$$

Fountain solution emissions

For fountain solution, there is a 70.0% capture efficiency by the control system and a 95.0% control efficiency as demonstrated in the following equations:

Stack Emissions

$$15\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.70) * (1.0 - 0.95) = \text{tons of VOC; and}$$

Fugitive Emissions

$$15\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.30) = \text{tons of VOC.}$$

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for fountain solution.

Aqueous Coatings emissions

For aqueous coatings, there is a 100.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equation:

$$14.6\% \text{ weight VOC content} * \text{material usage rate (tons)} * (1.0-0.95) = \text{tons of VOC.}$$



Metering Rolling Cleaner emissions

For Metering Rolling Cleaner, 100.0% is fugitive emissions as demonstrated in the following equation:

$$100\% \text{ weight VOC content} * \text{material usage rate (tons)} = \text{tons of VOC.}$$

Non-piling additive emissions

For non-piling additive, there is a 70.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equation:

Stack Emissions

$$52\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.70) * (1.0 - 0.95) = \text{tons of VOC; and}$$

Fugitive Emissions

$$52\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.30) = \text{tons of VOC.}$$

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for non-piling additive.

Auto Blanket Wash emissions

For Auto Blanket Wash, there is a 40.0% capture efficiency and a 95.0% control efficiency as demonstrated in the following equations:

Stack Emissions

$$100\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.40) * (1.0 - 0.95) = \text{tons of VOC.}$$

Fugitive Emissions

$$100\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.60) = \text{tons of VOC.}$$

Add the stack emissions to the fugitive emissions to obtain the total VOC emissions for auto blanket wash.

Manual Blanket Wash emissions

For Manual Blanket Wash, 50.0% of the VOC's are retained by rags, while 50.0% is fugitive emissions as demonstrated in the following equations:

Fugitive Emissions

$$100\% \text{ weight VOC content} * \text{material usage rate (tons)} * (0.50) = \text{tons of VOC.}$$

Add the auto blanket wash emissions to the manual blanket wash emissions to obtain the total VOC emissions for blanket wash.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]



d. Emission Limitation

Visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as specified by rule

Applicable Compliance Method

Compliance with the visible particulate emissions limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1)(a) and 77-07(A)(1)]

e. Emission Limitations:

The allowable emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R001, R002, R003, R004, R006, R007, and the inkjet printers shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be determined based upon a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the HAP emission limitations shall be demonstrated by the information collected and recorded in d)(2).

[Authority for term: OAC rules 3745-31-05(D) and 77-07(A)(1)]

f. Compliance with the percent by weight VOC content limitations specified in b)(2)d. and the usage limitations specified in c)(1) shall be demonstrated by the information collected and recorded in d)(1).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

g. Emission Limitations:

Dryer and thermal oxidizer emissions, R001-R007, combined:

Nitrogen oxides (NO_x) emissions shall not exceed 0.1 lb/mmBtu; 27.11 TPY of total NO_x emissions.

Carbon monoxide (CO) emissions shall not exceed 0.084 lb/mmBtu; 22.77 TPY of total CO emissions.

Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 lb/mmBtu; 0.16 TPY of total SO₂ emissions.

Particulate emissions (PE) shall not exceed 0.0076 lb/mmBtu; 0.47 lb/hour of PE from the thermal oxidizer exhausts; 2.06 TPY of total PE.

Particulate matter 10 microns and less (PM₁₀) emissions shall not exceed 0.0076 lb/mmBtu; 0.47 lb/hour of PM₁₀ emissions from the thermal oxidizer exhausts; 2.06 TPY of total PM₁₀ emissions.



Applicable Compliance Methods:

Compliance with the NOx, CO, SO2, PE and PM10 emission limits in b)(1) shall be determined by multiplying the fuel usage by the AP-42 emission factor taken from USEPA's AP-42, 5th Edition, Tables 1.4-1 and 1.4-2 dated 7/98.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- h. Compliance with the recordkeeping requirement of keeping monthly usage records for each emissions unit specified in (b)(2)h. shall be determined by the following example calculation:

$$Q (R00x) = Q \text{ total} \times [I (R001) / I (\text{sum of } R001- R004, R006, R007)]$$

Where:

Q (R00x) = the ink consumed by emission unit R00x for the month.

Q (total) = the total ink used by the permittee for the month.

I (R00x) = the total impressions for emissions unit R00x for the month.

I (sum of R001-R004, R006, and R007) = the total impressions for emissions units R001, R002, R003, R004, R006 and R007 for the month.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- i. Compliance with the vapor pressure limitation in term c)(3) shall be demonstrated by the record keeping in term d)(1).

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- j. Emission Limitation

Daily organic compound emissions from each emissions units R001, R002, R003, R004, R006 and R007, combined shall not exceed 1008.96 pounds per day which includes the following limits of 516.72 pounds per day from the oven exhaust and 492.24 pounds per day from the fugitive emissions associated with the fountain solution, blanket wash, non piling additive and metering roller cleaner.

Applicable Compliance Methods:

The daily OC emission limitations is based on the potentially hourly emission limitation multiplied by 24 hours per day.

[Authority for term: OAC rules 3745-31-05(A)(3) and 77-07(A)(1)]

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install # 14-05740, issued on November 25, 2008: f(1)a – f(1)(j). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Preliminary Proposed Title V Permit

Permit Number: P0100614

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Effective Date: To be entered upon final issuance

requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) Permit to Install 14-05281 had a VOC tons per year allowable of 83.85. This permitting action (Part 70 Title V Operating Permit) has an assigned VOC tons per year allowable of 183.59. Hence, a difference of $(183.59 - 83.85) = 99.74$ which is below major stationary source threshold levels for non-attainment review and therefore would not trigger non-attainment review for this amount of increase over previous permitted allowables.