John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/15/2013

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Jeffrey Menolascino
Hess Print Solutions
3765 Sunnybrook Road
Brimfield, OH 44240

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1667000047
Permit Number: P0110250
Permit Type: Renewal
County: Portage

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO)for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Record Courier. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now.If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
ARAQMD; Pennsylvania; West Virginia; Canada

PUBLIC NOTICE
3/15/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

Hess Print Solutions
3765 Sunnybrook Road,
Brimfield Twp., OH 44240
Portage County
FACILITY DESC.: Books Printing
PERMIT #: P0110250
PERMIT TYPE: Renewal
PERMIT DESC: Renewal Federally Enforceable Permit to Install and Operate for seven heatset web offset printing presses (K001-K006 and K009) and one non-heatset sheetfed printing press (K008).

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the permit # or: Laura Miracle, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308. Ph: (330)375-2480

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
Hess Print Solutions

Facility ID:	1667000047
Permit Number:	P0110250
Permit Type:	Renewal
Issued:	3/15/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Permit-to-Install and Operate
for
Hess Print Solutions

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Authorization

Facility ID: 1667000047
Application Number(s): A0044369
Permit Number: P0110250
Permit Description: Renewal Federally Enforceable Permit to Install and Operate for seven heatset web offset printing presses (K001-K006 and K009) and one non-heatset sheetfed printing press (K008).
Permit Type: Renewal
Permit Fee: $0.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 3/15/2013
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Hess Print Solutions
3765 Sunnybrook Road
Brimfield Twp., OH 44240

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

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0110250
Permit Description: Renewal Federally Enforceable Permit to Install and Operate for seven heatset web offset printing presses (K001-K006 and K009) and one non-heatset sheetfed printing press (K008).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**K008**
Company Equipment ID:	Press No. 214
Superseded Permit Number:	16-02284
General Permit Category and Type:	Not Applicable

Group Name: Heatset Web Offset Printing

Emissions Unit ID:	**K001**
Company Equipment ID:	Press No. 201
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K002**
Company Equipment ID:	Press No. 202
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K003**
Company Equipment ID:	Press No. 206
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K004**
Company Equipment ID:	Press No. 207
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K005**
Company Equipment ID:	Press No. 209
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K006**
Company Equipment ID:	Press No. 203
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K009**
Company Equipment ID:	Press No. 210
Superseded Permit Number:	16-02284
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement.Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) 2, 3, 4, 4.a), 4.b), 4.c), 4.d), 5 and 6.

2. The emissions of any individual hazardous air pollutant (HAP) from emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses*, combined, shall not exceed 8.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

3. The emissions of combined hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses*, combined, shall not exceed 20.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

   *The four Pre Presses are considered exempt per OAC rule 3745-15-05 based on daily and annual record keeping of the actual emissions. The potential to emit for the four Pre Presses for an individual HAP and combined HAPs is over 10 tons per year and 14 tons per year, respectively.

4. In order to demonstrate compliance with the emission limitations in 2 and 3 above, the permittee shall collect and record the following information monthly for emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses:

   a) For emissions units K001, K002, K003, K004, K005, K006, K009, K011 and K012:

      (1) the company identification for each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed;

      (2) the amount of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in gallons, pounds or number of rolls used;

      (3) the individual HAP content of each HAP of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in pound(s) per gallon, weight percent or pound(s) per roll;

      (4) the combined HAPs content of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed (the sum of all the individual HAP contents in a)(3) above), in pound(s) per gallon, weight percent or pound(s) per roll;

      (5) the uncontrolled individual HAP emission rate for each HAP from all coatings employed, in pounds or tons per month;

(6) the controlled individual HAP emission rate for each HAP from all coatings employed, in pounds or tons per month;

(7) the uncontrolled combined HAPs emission rate from all coatings employed, in pounds or tons per month;

(8) the controlled combined HAPs emission rate from all coatings employed, in pounds or tons per month;

(9) the uncontrolled individual HAP emission rate for each HAP from all concentrated fountain solutions employed, in pounds or tons per month;

(10) the controlled individual HAP emission rate for each HAP from all concentrated fountain solutions employed, in pounds or tons per month;

(11) the uncontrolled combined HAPs emission rate from all concentrated fountain solutions employed, in pounds or tons per month;

(12) the controlled combined HAPs emission rate from all concentrated fountain solutions employed, in pounds or tons per month;

(13) the individual HAP emission rate for each HAP from all manual cleanup materials employed, in pounds or tons per month;

(14) the combined HAPs emission rate from all manual cleanup materials employed, in pounds or tons per month;

(15) the uncontrolled individual HAP emission rate for each HAP from all automatic cleanup material employed, in pounds or tons per month;

(16) the controlled individual HAP emission rate for each HAP from all automatic cleanup material employed, in pounds or tons per month;

(17) the uncontrolled combined HAP emission rate from all automatic cleanup material employed, in pounds or tons per month;

(18) the controlled combined HAP emission rate from all automatic cleanup material employed, in pounds or tons per month;

(19) the individual HAP emission rate for each HAP from all automatic cleanup materials, all manual cleanup materials, all concentrated fountain solutions and all coatings employed, in pounds or tons per month; and

(20) the combined HAPs emission rate from all automatic cleanup materials, all manual cleanup materials, all concentrated fountain solutions and all coatings employed, in pounds or tons per month.

b) For emissions unit K008:

(1) the company identification for each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed;

(2) the amount of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in gallons or pounds;

(3) the individual HAP content of each HAP of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in pound(s) per gallon or weight percent;

(4) the combined HAPs content of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed (the sum of all the individual HAP contents in b)(3) above), in pound(s) per gallon or weight percent;

(5) the individual HAP emission rate for each HAP from all non-heatset inks employed, in pounds or tons;

(6) the combined HAPs emission rate from all non-heatset inks employed, in pounds or tons;

(7) the individual HAP emission rate for each HAP from all aqueous coatings employed, in pounds or tons;

(8) the combined HAPs emission rate from all aqueous coatings employed, in pounds or tons;

(9) the individual HAP emission rate for each HAP from all concentrated fountain etch solutions employed, in pounds or tons;

(10) the combined HAPs emission rate from all concentrated fountain etch solutions employed, in pounds or tons;

(11) the individual HAP emission rate for each HAP from all fountain solution additives employed, in pounds or tons;

(12) the combined HAPs emission rate from all fountain solution additives employed, in pounds or tons;

(13) the individual HAP emission rate for each HAP from all manual cleanup materials employed, in pounds or tons;

(14) the combined HAPs emission rate from all manual cleanup materials employed, in pounds or tons;

(15) the individual HAP emission rate for each HAP from all automatic cleanup materials employed, in pounds or tons;

(16) the combined HAPs emission rate from all automatic cleanup materials employed, in pounds or tons;

(17) the individual HAP emission rate for each HAP from all non-heatset ink, all aqueous coating, all concentrated fountain etch solution, all fountain solution additive, all manual cleanup material and all automatic cleanup material employed, in pounds or tons per month; and

(18) the combined HAPs emission rate from all non-heatset ink, all aqueous coating, all concentrated fountain etch solution, all fountain solution additive, all manual cleanup material and all automatic cleanup material employed, in pounds or tons per month.

c) For the four Pre Presses:

(1) the company identification for each material employed;

(2) the amount of each material employed, in gallons or pounds;

(3) the individual HAP content of each HAP of each material employed, in pound(s) per gallon or weight percent;

(4) the individual HAP emission rate for each HAP from all materials employed, in pounds or tons per month; and

(5) the combined HAPs emission rate from all materials employed, in pounds or tons.

d) For emissions unitsK001, K002,K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses:

(1) the total individual HAP emission rate for each HAP, in tons per month;

(2) the total combined HAPs emission rate, in tons per month;

(3) the rolling, 12-month summation of individual HAP emissions for each HAP for each month, in tons; and

(4) the rolling, 12-month summation of the total combined HAPs emissions for each month, in tons.

If the rolling, 12-month summation of combined HAPs is 8.0 tons per year or less for each month, then the rolling, 12-month summations of each individual HAP do not need to be calculated unless any subsequent rolling, 12-month summation exceeds 8.0 tons per year.

For determining the HAP emission in 4.a), the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I) and the control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions units were in compliance.

For determining the HAP emission in 4.b), the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I)

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

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

      (1) all exceedances of the rolling, 12-month emission limitation for any individual HAP; and

      (2) all exceedances of the rolling, 12-month emission limitation for the total combined HAPs.

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

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

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

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

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

6. Compliance with the Emissions Limitations and/or Control Requirements specified in 2 and 3 above shall be determined in accordance with the following methods:

   a) Emission Limitations:

      The emissions of any individual HAP from emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses, combined, shall not exceed 8.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

      The emissions of combined HAPs from emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011, K012 and the four Pre Presses, combined, shall not exceed 20.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

      Applicable Compliance Method:

      Compliance with the annual allowable emission limitations above shall be demonstrated through the record keeping requirements established in 4.a), 4.b), 4.c) and 4.d) above. Formulation data shall be used to determine the HAP content of the non-heatset inks, aqueous coatings, coatings, concentrated fountain solutions, concentrated fountain etch solutions, fountain solution additives, cleanup materials employed in emissions units K001, K002, K003, K004, K005, K006, K008, K009, K011 and K012 and the materials employed in the Pre Presses.

C. Emissions Unit Terms and Conditions

1. K008, Press No. 214

Operations, Property and/or Equipment Description:

Non-Heatset Sheetfed Printing Press No. 214 - Sheetfed Press No. 214

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

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

a. d)(6).

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

a. b)(1)c., d)(1), e)(1) and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The emissions of organic compounds (OC) from this emissions unit shall not exceed 4.46 pounds per hour for non-heatset inks, aqueous coatings, concentrated fountain etch solutions and fountain solution additives. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
b.	OAC rule 3745-21-22(D)	See b)(2)b. through b)(2)e. below.
c.	OAC rule 3745-31-05(D) (Synthetic Minor to Avoid Title V Permitting)	The emissions of volatile organic compounds (VOC) from emissionsunit K008 and Pre Press#1 shall not exceed 16.2 tons per year, based upon a rolling, 12-monthsummation of the monthly emissions. See 2 through 6 of Section B – Facility-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Wide Terms and Conditions.

(2) Additional Terms and Conditions

a. The hourly OC emission limitation regulated per OAC rule 3745-31-05(A)(3) is based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with this emission limitation.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increases the potential emissions of any air pollutant, then the permittee shall apply for and obtain either an administrative modification or a chapter 31 modification to the federally enforceable permit to install and operate (FEPTIO) prior to the change(s).

b. The permitteeshall maintain the as-appliedVOC content of the fountain solutionat or below 5.0 per cent, by weight and use no alcohol in the fountain solution.

c. The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.

d. The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operations.

e. The permittee shall keep all solvent-laden shop towels in closed containers when not being used.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to demonstrate compliance with the VOC emission limitation in 1.b)(1)c. above, the permittee shall collect and record the following information monthly for emissions unit K008 and Pre Press #1:

a. For emissions unit K008:

i. the company identification for each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed;

ii. the amount of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in gallons or pounds;

iii. the VOC content of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in pound(s) per gallon or weight percent;

iv. the VOC emission rate from all non-heatset inks employed, in pounds or tons;

v. the VOC emission rate from all aqueous coatings employed, in pounds or tons;

vi. the VOC emission rate from all concentrated fountain etch solutions employed, in pounds or tons;

vii. the VOC emission rate from all fountain solution additives employed, in pounds or tons;

viii. the VOC emission rate from all manual cleanup materials employed, in pounds or tons;

ix. the VOC emission rate from all automatic cleanup materials employed, in pounds or tons; and

x. the VOC emission rate for emissions unit K008, in pounds or tons per month.

For calculating the VOC emissions, the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I).

b. For Pre Press #1:

i. the company identification for each material employed;

ii. the amount of each material employed, in gallons or pounds;

iii. the VOC content of each material employed, in pound(s) per gallon or weight percent; and

iv. the VOC emission rate from all materials employed, in pounds or tons per month.

c. For emissions unit K008 and Pre Press #1, combined:

i. the VOC emission rate, in tons per month; and

ii. the rolling 12-month summation of the VOC emissions for each month, in tons.

(2) The VOC content of the as-applied fountain solution shall be determined by one of the methods in d)(2)a. to d)(2)c.:

a. USEPAMethod 24 shall be used to determine the VOC content of the as-applied fountain solution;

b. If diluted prior to use, a calculation shall be performed for VOC content that combines USEPAMethod 24 analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution.The analysis of the concentrated material(s) may be performed by the supplier(s) of those material(s).The analytical data may be derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on USEPAMethod 24 results; or

c. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS sheet or equivalent information from the supplier.In the event of a dispute between information provided by the supplier and data obtained by USEPAMethod 24, the data obtained by USEPAMethod 24 shall be employed.

(3) The VOC composite partial vapor pressure of cleaning solutions shall be determined by one of the following methods:

a. If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for "VOC composite vapor pressure" as follows:

i. Determine the identity and quantity of each compound in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer's product formulation data.

ii. Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as "Perry's Chemical Engineer's Handbook, CRC Handbook of Chemistry and Physics, or Lange's Handbook of Chemistry."

iii. Calculate the VOC composite partial pressure of the solvent by using the formula for "VOC composite partial pressure." For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where "Raoult's Law" applies. The partial vapor pressures of each compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit) shall be used in the formula. The VOC composite partial pressure shall be calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{\frac{(W_i)(VP_i)}{MW_i}}{\frac{W_W}{MW_W} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, in grams.

W_w = Weight of water, in grams.

W_e = Weight of exempt compound, in grams.

MW_i = Molecular weight of the "i"th VOC compound, in grams per gram-mole.

MW_w = Molecular weight of water, in grams per gram-mole.

MW_e = Molecular weight of the "e"th exempt compound, in grams per gram-mole.

PP_c= VOC composite partial vapor pressure at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

VP_i = Vapor pressure of the "i"th VOC compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

b. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS or equivalent information from the supplier as long as it is basedon results determined in accordance with the procedure under d)(3)a. above.

(4) The permittee shall maintain records, for a period of five years, of one of the following for fountain solution preparation:

a. For a permittee maintaining a recipe log for each batch of fountain solution prepared for use in the press:

i. A recipe log that identifies all recipes used to prepare the as-applied fountain solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared for a press. Each recipe shall clearly identify the following:

(a) VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using USEPA Method 24.

(b) The proportions in which the fountain solution is mixed, including the addition of alcohol and/or water. The proportion may be identified as a volume when preparing a discrete batch or may be identified as the settings when an automatic mixing unit is employed.

(c) The calculated VOC content of the final, mixed recipe.

ii. Identification of the recipe used to prepare each batch of fountain solution for use in the press.

iii. The date and time when the batch was prepared.

iv. An affirmation the batch was prepared in accordance with the recipe.

b. For a permittee not maintaining a recipe log in accordance with paragraph d)(4)a. above, for each batch of fountain solution prepared for use in the press:

i. The volume and VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using USEPA Method 24.

ii. The volume of alcohol added to make the batch of fountain solution.

iii. The volume of water added to make the batch of fountain solution.

iv. The calculated VOC content of the final, mixed batch.

v. The date and time the batch was prepared.

For purposes of d)(4)a. and d)(4)b. above, a fountain solution that is continuously blended with an automatic mixing unit is considered to be the same batch until such time that the recipe or mix ratio is changed.

(5) The permittee shall maintain records, for a period of five years, of the following for all cleaning solutions employed in all the offset lithographic and letterpress printing operations:

a. For a permittee maintaining a recipe log for each batch of cleaning solution prepared:

i. A recipe log that identifies all recipes used to prepare the as-applied cleaning solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared. Each recipe shall clearly identify the VOC composite partial vapor pressure of each cleaning solution, based upon the method under d)(3) above.

ii. Identification of the recipe used to prepare each batch of cleaning solution.

iii. The date and time when the batch was prepared.

iv. An affirmation the batch was prepared in accordance with the recipe.

b. For a permittee not maintaining a recipe log in accordance with d)(5)a. above, for each batch of cleaning solution prepared, records of the VOC composite partial vapor pressure and the date and time the batch was prepared.

(6) The permit to install (PTI) #16-02284 for this emissions unit (K008) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the PTI application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy

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

Pollutant: ethylene glycol butyl ether (CAS 111-76-2)

TLV (mg/m3): 97

Maximum Hourly Emission Rate (lbs/hr): 1.66*

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 320.0

MAGLC (ug/m3): 2309.5

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 73

Maximum Hourly Emission Rate (lbs/hr): 1.06*

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 192.6

MAGLC (ug/m3): 1738.1

Pollutant: isobutyl alcohol (CAS 78-83-1)

TLV (mg/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 0.5**

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 95.8

MAGLC (ug/m3): 3619

*Maximum emission rate from emissions units K001 through K009.

**Maximum emission rate from emissions units K007 and K008.

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

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

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

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

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

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

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

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

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

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

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

i. all exceedances of the rolling, 12-month emission limitation for VOC;

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

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

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

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

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

(2) The permittee shall notify the director of any of the following exceedances of the applicable requirements:

a. each calculated VOC content that exceeds the VOC content limitation specified in b)(2)b. above; and

b. each instance when an exceedance of the VOC composite partial vapor pressure specified in b)(2)c. above for cleaning solutions occurs.

Each notification shall be submitted to the director within forty-five days after the instance occurs, and it shall include a copy of the record showing the instance.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(4) The permittee shall notify the Ohio environmental protection agency district office or local air agency in writing within thirty daysfollowing the completion of any of the following requirements:

a. For an offset lithographic or letterpress printing press subject to the VOC emission requirements in paragraphs (D)(2) to (D)(8) of OAC rule 3745-21-22, the first documented achievement of compliance with each of the requirements;

(5) The compliance certification under e)(4) above shall provide the following, where applicable:

a. A description of the requirements;

b. A description of the VOC emission control system;

c. A description of the monitoring devices;

d. A description of the records that document continuing compliance;

e. The results of any compliance tests, including documentation of test data;

f. The results of any records that document continuing compliance, including calculations; and

g. A statement by the owner or operator of the offset lithographic or letterpress printing facility as to whether the offset lithographic or letterpress printing press has complied with the requirement(s).

f) Testing Requirements

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

a. Emission Limitation:

The emissions of OC from this emissions unit shall not exceed 4.46 pounds per hour for non-heatset inks, aqueous coatings, concentrated fountain etch solutions and fountain solution additives.

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation above shall be determined by the following equation:

[(maximum non-heat ink usage, in pounds per hour) x (worst-case weight fraction of OC) x (0.05*) + (maximum aqueous coating usage, in pounds per hour) x (worst-case weight fraction of OC) + (maximum concentrated fountain etch solution usage, in pounds per hour) x (worst-case weight fraction of OC) + (maximum concentrated fountain solution additive usage, in pounds per hour)]

*Emission factor is from OAC rule 3745-21-22(I).

b. Emission Limitation:

The emissions of VOC from emissionsunit K008 and Pre Press#1 shall not exceed 16.2 tons per year, based upon a rolling, 12-monthsummation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in d)(1) above. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of non-heatset inks, aqueous coatings, concentrated fountain etch solutions, fountain solution additives, manual cleanup materials, automatic cleanup materials employed in emissions unit K008 and the materials employed in Pre Press #1.

c. Emission Limitation:

The permitteeshall maintain the as-applied VOC content of the fountain solutionat or below 5.0 per cent, by weight and use no alcohol in the fountain solution.

Applicable Compliance Method:

Compliance with the allowable VOC content limitation above shall be demonstrated through the record keeping requirements in d)(2) and d)(4) above.

d. Emission Limitation:

The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.

Applicable Compliance Method:

Compliance with the allowable VOC composite partial vapor pressure limitation above shall be demonstrated through the record keeping requirements in d)(3) and d)(5) above.

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group -Heatset Web Offset Printing: K001,K002,K003,K004,K005,K006,K009,

EU ID	Operations, Property and/or Equipment Description
K001	2-Unit Timson Heatset Web Offset Printing Press No. 201 Model No T32 - Timson Press No. 201
K002	2-Unit Timson Heatset Web Offset Printing Press No. 202 Model No T32 - Timson Press No. 202
K003	5-Unit Harris M-300 Heatset Web Offset Printing Press No. 206 - Harris Press No. 206
K004	8-Unit Harris M-300 Heatset Offset Printing Press No. 207 - Harris Press No. 207
K005	8-Unit Harris M-600 Heatset Web Offset Printing Press No. 209 - Harris Press No. 209
K006	2-Unit Timson Heatset Web Offset Printing Press No 203 Model No. T32 - Timson Press No. 203
K009	8-Unit Harris M-1000BE Heatset Web Offset Printing Press No. 210 - Harris Press No. 210

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

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

a. d)(9).

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

a. b)(1)k., d)(1), d)(2), d)(3), d)(4), e)(1), e)(2), f)(1), f)(2), f)(3), f)(4), f)(5)a., f)(5)h., and f)(5)i.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (Requirements for Emissions Units K001 and K002)	For emissions units K001 and K002: The emissions of organic compounds (OC) from each emissions unit shall not exceed 0.45 pound per hour for coatings andfountain solutions. For emissions units K001 and K002: The particulate emissions (PE) from each emissions unit shall not exceed 0.4 pound

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		of per hour and 1.8 tons per year(including combustionemissions). For emissions units K001 and K002: The natural gas combustion emissionsfrom the dryer oven(s)* of each emissions unit shall not exceedthe following: 0.64 pound of carbon monoxide (CO) per hour and 2.8tons of CO per year; 0.76 pound of nitrogen oxides (NO_x)per hour and 3.3tons of NO_x per year; and 0.08 pound of OC per hour and 0.4ton of OC per year. The requirements of this rule alsoinclude compliance with therequirements of OAC rule 3745-17-07and OAC rule 3745-31-05(D). *Emissions unit K001 has two drying ovens. Emissions unit K002 has one drying oven.
b.	OAC rule 3745-31-05(A)(3) (Requirements for Emissions Units K003 and K004)	For emissions units K003 and K004: The emissions of OC from each emissions unit shall not exceed 2.08 pounds per hour for coatings and fountain solutions. For emissions units K003 and K004: The PE from each emissions unit shall not exceed 0.4 pound of per hour and 1.8 tons per year(including combustionemissions). For emissions units K003 and K004: The natural gas combustion emissionsfrom the dryer oven of each emissions unit shall not exceedthe following: 0.55 pound of CO per hour and 2.4 tons of CO per year; 0.66 pound of NO_x per hour and 2.9 tons of NO_x per year; and

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.07 pound of OC per hour and 0.3 ton of OC per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07 and OAC rule 3745-31-05(D).
c.	OAC rule 3745-31-05(A)(3) (Requirements for Emissions Unit K005)	The emissions of OC from emissions unit K005 shall not exceed 2.44 pounds per hour for coatings andfountain solutions. The PE from emissions unit K005 shall not exceed 0.4 pound per hour and 1.8 tons per year (including combustionemissions). Natural gas combustion emissionsfrom the dryer oven of emissions unit K005 shall not exceedthe following: 0.93 pound of CO per hour and 4.1tons of CO per year; 1.10 pounds of NO_x per hour and4.8 tons of NO_x per year; and 0.12 pound of OC per hour and 0.5ton of OC per year. The requirements of this rule alsoinclude compliance with therequirements of OAC rule 3745-17-07and OAC rule 3745-31-05(D).
d.	OAC rule 3745-31-05(A)(3) (Requirements for Emissions Unit K006)	The emissions of OC from emissions unit K006 shall not exceed 0.58 pound of per hour for coatings andfountain solutions. The PE from emissions unit K006 shall not exceed 2.4 tons per year (includingcombustion emissions). Natural gas combustion emissionsfrom the two dryer ovens of emissions unit K006 shall notexceed the following: 0.40 pound of CO per hour and1.75 tons of CO per year;

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.47 pound of NO_x per hour and2.1 tons of NO_x per year; and 0.05 pound of OC per hour and 0.2ton of OC per year. The requirements of this rule alsoinclude compliance with therequirements of OAC rule 3745-17-07, OAC rule 3745-17-11and OAC rule 3745-31-05(D).
e.	OAC rule 3745-31-05(A)(3) (Requirements for Emissions Unit K009)	The emissions of OC from emissions unit K009 shall not exceed 3.05 poundsper hour for coatings andfountain solutions. The PE from emissions unit K009 shall not exceed 3.2 tons per year (includingcombustion emissions). Natural gas combustion emissions from the two dryer ovens of emissions unit K009 shall not exceed the following: 1.04 pounds of CO per hour and 4.6 tons of CO per year; 1.23 pounds of NO_x per hour and 5.4 tons of NO_x per year; and 0.14 pound of OC per hour and 0.6 ton of OC per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07, OAC rule 3745-17-11 and OAC rule 3745-31-05(D).
f.	OAC rule 3745-31-05(A)(3) (Requirements for the RTO thermal oxidizer)	Natural gas combustion emissions from the RTO thermal oxidizer shall not exceed the following: 0.72 pound of CO per hour and 3.2 tons of CO per year; 0.86 pound of NO_x per hour and 3.8 tons of NO_x per year; and 0.10 pound of OC per hour and 0.4 ton of

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		OC per year.
g.	OAC rule 3745-17-07(A)	For emissions units K001, K002, K003, K004, K005, K006 and K009, visible particulate emissions from anystack shall not exceed 20% opacity asa 6-minute average, except asprovided by the rule.
h.	OAC rule 3745-17-11	For emissions units K001, K002, K003, K004 and K005, the emission limitation specified by this rule is less stringent than the emission limitation established in pursuant to OAC rule 3745-31-05(A)(3). The PE from emissions unit K006 shall not exceed 0.551 pound per hour (including combustion emissions). The PE from emissions unit K009 shall not exceed 0.74 pound per hour(including combustion emissions).
i.	OAC rule 3745-21-07(M)(3)(c)(vi)	Exempt [the heatset web offset printing line that is subject to and complying with a best available technology requirement, pursuant to rule 3745-31-05 of the Administrative Code, that specifies the dryer(s) to be equipped with a control device having either a control efficiency for organic compound or VOC emissions that is equal to or greater than ninety per cent, by weight, or an outlet concentration of less than twenty parts per million, by volume, dry basis for organic compound or VOC emissions (a heatset web offset printing line is an offset lithographic printing line in which the substrate is continuously fed from a roll and a heated oven is used to dry the printing inks)].
j.	OAC rule 3745-22-21(D)	The permittee shall maintain the dryer air pressure lower than the pressroom air pressure at all times the press is operating and operate a control system. The control efficiency requirement specified by this rule is lessstringent than the control efficiency requirement established in pursuant to OAC rule3745-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		31-05(D). See b)(2)d. through b)(2)g. below.
k.	OAC rule 3745-31-05(D) (Synthetic Minor to Avoid Title V Permitting)	The control (destruction) efficiency ofthe RTO thermal oxidizer shall beat least 95%, by weight for volatile organic compounds (VOC) andorganic hazardous air pollutant (HAP). The emissions of VOC from emissionsunits K001, K002, K003, K004,K005, K006, K009, Pre Presses #2, Pre Press #3 and Pre Press #4, combined, shall notexceed 48.3 tons per year, based upona rolling, 12-month summation of themonthlyemissions. See 2 through 6 of Section B – Facility-Wide Terms and Conditions.

(2) Additional Terms and Conditions

a. For emissions units K001, K002, K003, K004, K005, K006 and K009, the hourly OC emission limitation regulated per OAC rule 3745-31-05(A)(3) is based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increases the potential emissions of any air pollutant, then the permittee shall apply for and obtain either an administrative modification or a chapter 31 modification to the federally enforceable permit to install and operate (FEPTIO) prior to the change(s).

b. For emissions units K001, K002, K003, K004 and K005, the hourly and annual CO, NO_x and OC emission limitations from natural gas combustion and the hourly and annual PE limitations regulated per OAC rule 3745-31-05(A)(3) are based on the emissions unit's potentials to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these emission limitations.

c. For emissions units K006 and K009, the hourly and annual CO, NO_x and OC emission limitations from natural gas combustion and the annual PE limitation regulated per OAC rule 3745-31-05(A)(3) and the hourly PE limitation regulated per OAC rule 3745-17-11 are based on the emissions unit's potentials to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these emission limitations.

d. The permitteeshall maintain the as-appliedVOC content of the fountain solutionat or below 5.0 per cent, by weight and use no alcohol in the fountain solution.

e. The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.

f. The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operations.

g. The permittee shall keep all solvent-laden shop towels in closed containers when not being used.

h. The VOC and organic HAP emissions from the emissions units listed above shall be vented to the RTO thermal oxidizer when the emissions unit(s) is/are in operation.

c) Operational Restrictions

(1) The dryer oven for the emissions units listed above shall only employ natural gas.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to demonstrate compliance with the emission limitation in 1.b)(1)k. above, the permittee shall collect and record the following information monthly for emissions units K001, K002, K003, K004, K005, K006, K009, Pre Press #2, Pre Press #3 and Pre Press #4, combined:

a. For emissions unit K001, K002, K003, K004, K005, K006 and K009:

i. the company identification for each coating, concentrated fountain solution, manual cleanup material and automatic cleanup material employed;

ii. the amount of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in gallons, pounds or number of rolls used;

iii. the VOC content of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in pound(s) per gallon, weight percent or pound(s) per roll;

iv. the uncontrolled VOC emission rate from all coatings employed, in pounds or tons per month;

v. the controlled VOC emission rate from all coatings employed, in pounds or tons per month;

vi. the uncontrolled VOC emission rate from all concentrated fountain solutions employed, in pounds or tons per month;

vii. the controlled VOC emission rate from all concentrated fountain solutions employed, in pounds or tons per month;

viii. the VOC emission rate from all manual cleanup materials employed, in pounds or tons per month;

ix. the uncontrolled VOC emission rate from all automatic cleanup material employed, in pounds or tons per month;

x. the controlled VOC emission rate from all automatic cleanup material employed, in pounds or tons per month; and

xi. the VOC emission rate from the emissions units K001, K002, K003, K004, K005, K006 and K009, combined, in pounds or tons per month.

For calculating the VOC emissions, the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I) and the control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions units were in compliance.

b. For Pre Press #2, Pre Press #3 and Pre Press #4:

i. the company identification for each material employed;

ii. the amount of each material employed, in gallons or pounds;

iii. the VOC content of each material employed, in pound(s) per gallon or weight percent; and

iv. the VOC emission rate from all materials employed, in pounds or tons per month.

c. For emissions units K001, K002, K003, K004, K005, K006, K009, Pre Press #2, Pre Press #3 and Pre Press #4, combined:

i. the VOC emission rate, in tons per month; and

ii. the rolling 12-month summation of the VOC emissions for each month, in tons.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizerduring any period of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation,shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

(3) The permittee shall install and operate continuous temperature monitoring and recording equipment that measures and records temperature data at least once every fifteenminutes, and shall collect and record the following information and maintain the information at the facility for a period of five years:

a. a log or record of any time when the control device and/or, monitoring equipment, are not in operation when any associated press is in operation; and

b. for thermal oxidizers all three-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit below the average combustion temperature during the most recent emission test that demonstrated that the emissions units listed above were in compliance.

(4) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, 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;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the temperature readings immediately after the corrective action was implemented; and

k. the name(s) 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.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performancetests

that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(5) The VOC content of the as-applied fountain solution shall be determined by one of the methods in d)(5)a. to d)(5)c.:

a. USEPAMethod 24 shall be used to determine the VOC content of the as-applied fountain solution;

b. If diluted prior to use, a calculation shall be performed for VOC content that combines USEPAMethod 24 analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution.The analysis of the concentrated material(s) may be performed by the supplier(s) of those material(s).The analytical data may be derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on USEPAMethod 24 results; or

c. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS sheet or equivalent information from the supplier.In the event of a dispute between information provided by the supplier and data obtained by USEPAMethod 24, the data obtained by USEPAMethod 24 shall be employed.

(6) The VOC composite partial vapor pressure of cleaning solutions shall be determined by one of the following methods:

a. If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for “VOC composite vapor pressure” as follows:

i. Determine the identity and quantity of each compound in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer’s product formulation data.

ii. Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as “Perry’s Chemical Engineer’s Handbook, CRC Handbook of Chemistry and Physics, or Lange’s Handbook of Chemistry.”

iii. Calculate the VOC composite partial pressure of the solvent by using the formula for “VOC composite partial pressure.” For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where “Raoult’s Law” applies. The partial vapor pressures of each compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit) shall be used in the formula. The VOC composite partial pressure shall be calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{\frac{(W_i)(VP_i)}{MW_i}}{\frac{W_W}{MW_W} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, in grams.

W_w = Weight of water, in grams.

W_e = Weight of exempt compound, in grams.

MW_i = Molecular weight of the "i"th VOC compound, in grams per gram-mole.

MW_w = Molecular weight of water, in grams per gram-mole.

MW_e = Molecular weight of the "e"th exempt compound, in grams per gram-mole.

PP_c= VOC composite partial vapor pressure at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

VP_i = Vapor pressure of the "i"th VOC compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

b. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS or equivalent information from the supplier as long as it is basedon results determined in accordance with the procedure under d)(6)a. above.

(7) The permittee shall maintain records, for a period of five years, of one of the following for fountain solution preparation:

a. For a permittee maintaining a recipe log for each batch of fountain solution prepared for use in the press:

i. A recipe log that identifies all recipes used to prepare the as-applied fountain solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared for a press. Each recipe shall clearly identify the following:

(a) VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using USEPA Method 24.

(b) The proportions in which the fountain solution is mixed, including the addition of alcohol and/or water. The proportion may be identified as a volume when preparing a discrete batch or may be

identified as the settings when an automatic mixing unit is employed.

(c) The calculated VOC content of the final, mixed recipe.

ii. Identification of the recipe used to prepare each batch of fountain solution for use in the press.

iii. The date and time when the batch was prepared.

iv. An affirmation the batch was prepared in accordance with the recipe.

b. For a permittee not maintaining a recipe log in accordance with paragraph d)(7)a. above, for each batch of fountain solution prepared for use in the press:

i. The volume and VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using USEPA Method 24.

ii. The volume of alcohol added to make the batch of fountain solution.

iii. The volume of water added to make the batch of fountain solution.

iv. The calculated VOC content of the final, mixed batch.

v. The date and time the batch was prepared.

For purposes of d)(7)a. and d)(7)b. above, a fountain solution that is continuously blended with an automatic mixing unit is considered to be the same batch until such time that the recipe or mix ratio is changed.

(8) The permittee shall maintain records, for a period of five years, of the following for all cleaning solutions employed in all the offset lithographic and letterpress printing operations:

a. For a permittee maintaining a recipe log for each batch of cleaning solution prepared:

i. A recipe log that identifies all recipes used to prepare the as-applied cleaning solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared. Each recipe shall clearly identify the VOC composite partial vapor pressure of each cleaning solution, based upon the method under d)(6) above.

ii. Identification of the recipe used to prepare each batch of cleaning solution.

iii. The date and time when the batch was prepared.

iv. An affirmation the batch was prepared in accordance with the recipe.

b. For a permittee not maintaining a recipe log in accordance with d)(8)a. above, for each batch of cleaning solution prepared, records of the VOC composite partial vapor pressure and the date and time the batch was prepared.

(9) The permit to install (PTI) #16-02284 for the emissions units listed above (K001, K002, K003, K004, K005, K006 and K009) were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the PTI. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the PTI application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethylene glycol butyl ether (CAS 111-76-2)

TLV (mg/m3): 97

Maximum Hourly Emission Rate (lbs/hr): 1.66*

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 320.0

MAGLC (ug/m3): 2309.5

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 73

Maximum Hourly Emission Rate (lbs/hr): 1.06*

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 192.6

MAGLC (ug/m3): 1738.1

Pollutant: stoddard solvent (CAS 8052-41-3)

TLV (mg/m3): 525

Maximum Hourly Emission Rate (lbs/hr): 8.27**

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1661

MAGLC (ug/m3): 12500

*Maximum emission rate from emissions units K001 through K009.

**Maximum emission rate from emissions units K001 through K006 and K009.

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

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

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

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

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

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

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

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

f. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

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

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

i. all exceedances of the rolling 12-month emission limitation for VOC; and

ii. any 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.

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

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

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

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

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

(2) The permittee shall notify the director of any of the following exceedances of the applicable requirements:

a. each calculated VOC content that exceeds the VOC content limitation specified in b)(2)d. above;

b. each instance when an exceedance of the VOC composite partial vapor pressure specified in b)(2)e. above for cleaning solutions occurs; and

c. all three-hour blocks of time during which the average combustion temperature within the thermal oxidizer was below the temperature limitation specified in d)(2) above.

Each notification shall be submitted to the director within forty-five days after the instance occurs, and it shall include a copy of the record showing the instance.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(4) The permittee shall notify the Ohio environmental protection agency district office or local air agency in writing within thirty daysfollowing the completion of any of the following requirements:

a. For an offset lithographic or letterpress printing press subject to the VOC emission requirements in paragraphs (D)(2) to (D)(8) of OAC rule 3745-21-22, the first documented achievement of compliance with each of the requirements;

b. For an offset lithographic or letterpress printing press subject to the VOC emission control requirement in paragraph (D)(1) of OAC rule 3745-21-22:

i. The completion of installation and initial use of a VOC emission control system for the offset lithographic or letterpress printing press;

ii. The completion of installation and initial use of any monitoring devices required under paragraph (G) of OAC rule 3745-21-22 for the offset lithographic printing press; and

iii. The completion of any compliance testing conducted in accordance with paragraph (F) of OAC rule 3745-21-22 to demonstrate compliance with the applicable control requirement.

(5) The compliance certification under e)(4) above shall provide the following, where applicable:

a. A description of the requirements;

b. A description of the VOC emission control system;

c. A description of the monitoring devices;

d. A description of the records that document continuing compliance;

e. The results of any compliance tests, including documentation of test data;

f. The results of any records that document continuing compliance, including calculations; and

g. A statement by the owner or operator of the offset lithographic or letterpress printing facility as to whether the offset lithographic or letterpress printing press has complied with the requirement(s).

f) Testing Requirements

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

a. The emission testing shall be conducted within 3 months after the start-up of emissions units K011 and K012 and within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency for VOC and organic HAP and the emissions control requirements of paragraph (D)(1) of OAC rule 3745-21-22.

c. Compliance shall be determined by performing emission tests in accordance with the following:

d. the emissions units listed above shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

e. The negative dryer pressure shall be established during the initial test using an airflow direction indicator, such as a smoke stick or aluminum ribbons, or differential pressure gauge. Capture efficiency and continuous dryer air flow monitoring is not required.

f. The following USEPA test methods (in 40 CFR Part 60, Appendix A) shall be used to demonstrate compliance with the applicable emission control requirement in paragraph (D)(1) of OAC rule 3745-21-22:

i. USEPA Method 1 or 1A, as appropriate, shall be used to select the sampling sites.

ii. USEPA Method 2, 2A, 2C or 2D, as appropriate, shall be used to determine the velocity and volumetric flow rate of the exhaust stream.

iii. USEPA Method 3 or 3A, as appropriate, shall be used to determine the concentration of $O_2$and CO_2.

iv. USEPA Method 4 shall be used to determine moisture content.

v. USEPA Method 18, 25 or 25A shall be used to determine the VOC concentration of the exhaust stream entering and exiting the control device, unless the alternate limit of twenty ppmv as specified in paragraphs (D)(1)(a) and (D)(1)(b) of OAC rule 3745-21-22 is being met, in which case only the VOC concentration of the exit exhaust shall be determined. In cases where the anticipated outlet VOC concentration of the control device is less than fifty ppm_v as carbon, USEPA Method 25A shall be used.

(a) If the average concentrations in the outlet of a thermal or catalytic oxidizer measured by USEPA Method 25A are found to be greater than fifty ppm_v as carbon, USEPA Method 18 or 25 may be used to determine non-VOC components (methane and ethane) to correct the outlet VOC readings, unless the director determines that the uncorrected USEPA Method 25A results are acceptable.

(b) A compliance test shall consist of up to three separate runs, each lasting a minimum of sixty minutes, unless the director determines that process variables dictate shorter sampling times.

(c) USEPA Method 25 specifies a minimum probe temperature of two hundred sixty-five degrees Fahrenheit. To prevent condensation, the probe should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit.

(d) USEPA Method 25A specifies a minimum temperature of two hundred twenty degrees Fahrenheit for the sampling components leading to the analyzer. To prevent condensation when testing heatset web offset presses, the sampling components and flame ionization detector block should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit.

(e) The use of an adaptation to any of the analytical methods specified above shall be approved by the director and USEPA on a case-by-case basis. The owner or operator shall submit sufficient documentation for the director and USEPA to find that the analytical methods specified above will yield inaccurate results and that the proposed adaptation is appropriate.

(2) 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).

(3) 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.

(4) 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.

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

a. Emission Limitations:

For emissions units K001 and K002: The emissions of OC from each emissions unit shall not exceed 0.45 pound per hour for coatings and fountain solutions.

For emissions units K003 and K004: The emissions of OC from each emissions unit shall not exceed 2.08 pounds per hour for coatings and fountain solutions.

The emissions of OC from emissions unit K005 shall not exceed 2.44 pounds per hour for coatings and fountain solutions.

The emissions of OC from emissions unit K006 shall not exceed 0.58 pound of per hour for coatings and fountain solutions.

The emissions of OC from emissions unit K009 shall not exceed 3.05 pounds per hour for coatings and fountain solutions

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitations above shall be determined by the following equation:

[(maximum coating usage, in pounds per hour) x (worst-case weight fraction of OC) x (0.8*) x (1-0.95**) + (maximum concentrated fountain solution usage, in pounds per hour) x (worst-case weight fraction of OC) x (1- (0.7*) x (0.95**)]

*Capture efficiency and retention factor are from OAC rule 3745-21-22(I)

**Minimum required control efficiency for the RTO thermal oxidizer.

b. Emission Limitations:

For emissions units K001, K002, K003, K004 and K005: The PE from each emissions unit shall not exceed 0.4 pound of per hour (including combustion emissions).

The PE from emissions unit K006 shall not exceed 0.551 pound per hour (including combustion emissions).

The PE from emissions unit K009 shall not exceed 0.74 pound per hour(including combustion emissions).

Applicable Compliance Method:

If required, compliance with the hourly allowable PE limitations above shall be demonstrated through stack testing in accordance with the test method(s) and procedures in OAC rule 3745-17-03(B)(10).

c. Emission Limitations:

For emissions units K001 and K002: 0.64 pound of CO per hour from the dryer oven(s) of each emissions unit

For emissions units K003 and K004: 0.55 pound of CO per hourfrom the dryer oven of each emissions unit

0.93 pound of CO per hourfrom the dryer oven of emissions unit K005

0.40 pound of CO per hourfrom the two dryer ovens of emissions unit K006

1.04 pounds of CO per hourfrom the two dryer ovens of emissions unit K009

0.72 pound of CO per hourfrom the RTO thermal oxidizer

Applicable Compliance Method:

Compliance with the hourly allowable CO emission limitations above shall be demonstrated by multiplying the CO emission factor of 84 pounds of CO emissions per million cubic feet of natural gas* by the maximum hourly natural gas usage.

*The CO emission factor is from AP- 42, 5th edition, Table 1.4-1, dated 7/98.

d. Emission Limitations:

For emissions units K001 and K002: 0.76 pound of NO_xper hourfrom the dryer oven(s) of each emissions unit

For emissions units K003 and K004: 0.66 pound of NO_x per hourfrom the dryer oven of each emissions unit

1.10 pounds of NO_x per hourfrom the dryer oven of emissions unit K005

0.47 pound of NO_x per hourfrom the two dryer ovens of emissions unit K006

1.23 pounds of NO_x per hourfrom the two dryer ovensof emissions unit K009

0.86 pound of NO_x per hourfrom the RTO thermal oxidizer

Applicable Compliance Method:

Compliance with the hourly allowable NO_x shall be demonstrated by multiplying the NO_x emission factor of 100 pounds of NO_x emissions per million cubic feet of natural gas* by the maximum hourly natural gas usage.

*The NO_x emission factor is from AP-42, 5th edition, Table 1.4-1, dated 7/98.

e. Emission Limitations:

For emissions units K001 and K002: 0.08 pound of OC per hourfrom the dryer oven(s) of each emissions unit

For emissions units K003 and K004: 0.07 pound of OC per hourfrom the dryer oven of each emissions unit

0.12 pound of OC per hourfrom the dryer oven of emissions unit K005

0.05 pound of OC per hourfrom the two dryer ovens of emissions unit K006

0.14 pound of OC per hourfrom the two dryer ovens of emissions unit K009

0.10 pound of OC per hourfrom the RTO thermal oxidizer

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitations above shall be demonstrated by multiplying the OC emission factor of 11 pounds of OC emissions per million cubic feet of natural gas* by the maximum hourly natural gas usage.

*The OC emission factor is from AP-42, 5th edition, Table 1.4-2, dated 7/98.

f. Emission Limitations:

For emissions units K001, K002, K003, K004 and K005: The PE from each emissions unit shall not exceed1.8 tons per year (including combustion emissions).

The PE from emissions unit K006 shall not exceed 2.4 tons per year (including combustion emissions).

The PE from emissions unit K009 shall not exceed 3.2 tons per year (includingcombustion emissions).

For emissions units K001 and K002: The natural gas combustion emissions from the dryer oven(s) of each emissions unit shall not exceed the following:2.8 tons of CO per year;3.3 tons of NO_x per year and0.4 ton of OC per year.

For emissions units K003 and K004: The natural gas combustion emissions from the dryer oven of each emissions unit shall not exceed the following:2.4 tons of CO per year;2.9 tons of NO_x per year and 0.3 ton of OC per year.

Natural gas combustion emissions from the dryer oven of emissions unit K005 shall not exceed the following:4.1 tonsof CO per year; 4.8 tons of NO_x per year and 0.5 ton of OC per year.

Natural gas combustion emissions from the two dryer ovens of emissions unit K006 shall not exceed the following: 1.75 tons of CO per year;2.1 tons of NO_x per year and 0.2 ton of OC per year.

Natural gas combustion emissions from the two dryer ovens of emissions unit K009 shall not exceed the following:4.6 tons of CO per year; 5.4 tons of NO_x per year and 0.6 ton of OC per year.

Natural gas combustion emissions from the RTO thermal oxidizer shall not exceed the following:3.2 tons of CO per year; 3.8 tons of NO_x per year and 0.4 ton of OC per year.

Applicable Compliance Method:

Compliance with the annual allowable emission limitations above shall be demonstrated by multiplying the hourly allowable emission limitation by the 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly allowable emission limitations is maintained, compliance with the annual allowable emission limitations shall be demonstrated.

g. Emission Limitation:

For emissions units K001, K002, K003, K004, K005, K006 and K009, visible particulate emissions from anystack shall not exceed 20% opacity asa 6-minute average, except asprovided by the rule.

Applicable Compliance Method:

If required, compliance with the allowable visible PE limitation above shall be determined through visible emission observations performed in accordance with USEPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

h. Emission Limitation:

The control efficiency of the RTO thermal oxidizer shall be at least 95%, by weight for VOC and organic HAP

Applicable Compliance Method:

Compliance with the allowable control efficiency requirement above shall be determined in accordance with the test methods and procedures specified in f)(1) above.

i. Emission Limitation:

The emissions of VOC from emissionsunits K001, K002, K003, K004,K005, K006, K009, Pre Presses #2, Pre Press #3 and Pre Press #4, combined, shall notexceed 48.3 tons per year, based upona rolling, 12-month summation of themonthlyemissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in d)(1) above. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the coatings, concentrated fountain solutions, manual cleanup materials, automatic cleanup materials employed in emissions units K001, K002, K003, K004,K005, K006 and K009 and the materials employed in the Pre Press #2, Pre Press #3 and Pre Press #4.

j. Emission Limitation:

The permitteeshall maintain the as-applied VOC content of the fountain solutionat or below 5.0 per cent, by weight and use no alcohol in the fountain solution.

Applicable Compliance Method:

Compliance with the allowable VOC content limitation above shall be demonstrated through the record keeping requirements in d)(5) and d)(7) above.

k. Emission Limitation:

The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.

Applicable Compliance Method:

Compliance with the allowable VOC composite partial vapor pressure limitation above shall be demonstrated through the record keeping requirements in d)(6) and d)(8) above.

g) Miscellaneous Requirements

(1) None.