



3/20/2015

Certified Mail

Mr. Chuck Babcock
 GRAPHIC PACKAGING INTERNATIONAL, INC
 6385 Cochran Road
 Solon, OH 44139

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
 Facility ID: 1318532181
 Permit Number: P0117951
 Permit Type: Renewal
 County: Cuyahoga

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: CDAQ



Response to Comments

Facility ID:	1318532181
Facility Name:	GRAPHIC PACKAGING INTERNATIONAL, INC
Facility Description:	Folding Carton Mfr
Facility Address:	6385 Cochran Road Solon, OH 44139 Cuyahoga County
Permit:	P0117951, Permit-To-Install and Operate - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 02/14/2015. The comment period ended on 03/16/2015.	
Hearing date (if held)	n/a
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None

- a. Comment: None
- b. Response: None

No comments were received for this draft FEPTIO permit that was issued on 2/12/2015.



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
GRAPHIC PACKAGING INTERNATIONAL, INC**

Facility ID:	1318532181
Permit Number:	P0117951
Permit Type:	Renewal
Issued:	3/20/2015
Effective:	3/20/2015
Expiration:	3/20/2020



Division of Air Pollution Control
Permit-to-Install and Operate
for
GRAPHIC PACKAGING INTERNATIONAL, INC

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Authorization

Facility ID: 1318532181
Application Number(s): A0051775
Permit Number: P0117951
Permit Description: FEPTIO renewal permit for two lithographic printing presses (K008 and K009), two flexographic printing units (K010 and K011), and two Asitrade corrugating machines (P001 and P002).
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 3/20/2015
Effective Date: 3/20/2015
Expiration Date: 3/20/2020
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

GRAPHIC PACKAGING INTERNATIONAL, INC
6385 Cochran Road
Solon, OH 44139

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:

Cleveland Division of Air Quality
2nd Floor
75 Erievue Plaza
Cleveland, OH 44114
(216)664-2297

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


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0117951
Permit Description: FEPTIO renewal permit for two lithographic printing presses (K008 and K009), two flexographic printing units (K010 and K011), and two Asitrade corrugating machines (P001 and P002).

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:	Sheetfed Offset Press KBA97
Superseded Permit Number:	P0105254
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K009
Company Equipment ID:	Sheetfed Offset Press KBA972
Superseded Permit Number:	P0105254
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K010
Company Equipment ID:	Flexographic unit No. 1
Superseded Permit Number:	P0105973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K011
Company Equipment ID:	Flexographic unit No. 2
Superseded Permit Number:	P0105973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	Asitrade Corrugating Machine 1
Superseded Permit Number:	P0105973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	Asitrade Corrugating Machine 2
Superseded Permit Number:	P0105973
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
GRAPHIC PACKAGING INTERNATIONAL, INC
Permit Number: P0117951
Facility ID: 1318532181
Effective Date: 3/20/2015

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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



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

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

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

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

7. What reports must I submit under this permit?

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

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

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit 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 [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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



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

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

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

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

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

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



Final Permit-to-Install and Operate
GRAPHIC PACKAGING INTERNATIONAL, INC
Permit Number: P0117951
Facility ID: 1318532181
Effective Date: 3/20/2015

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.

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.

(2) 1.c), 1.e), 1.f), and 1.g)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(D)(2) Synthetic Minor to avoid Title V and MACT	See c)(2) below.

(2) Additional Terms and Conditions

- a. The maximum annual VOC emissions for the facility shall not exceed 97.1 tons/year (tpy), based upon a rolling, 12-month summation of the monthly VOC emissions.
- b. The emissions of Hazardous Air Pollutants (HAPs) from this facility shall not exceed 9.9 tpy for any single HAP and 24.9 tpy from any combination of HAPs, based on a rolling, 12-month summation of the monthly HAP material usage rates.
- c. The facility-wide emission limits shall include emissions from the following units: B002, K008, K009, K010, K011, P001, P002 and five de minimis gluers.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for this facility:
 - a. the name and identification number of each ink, coating, and fountain solution employed;
 - b. the VOC content of each ink, coating and fountain solution, in weight percent;
 - c. the amount, in pounds, of each ink, coating and fountain solution employed;
 - d. the name and identification of each cleanup material employed;
 - e. the VOC content of each cleanup material, in weight percent;
 - f. the amount, in pounds, of each cleanup material employed;
 - g. the total VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of $[(b) * (c) * (100\% - \text{solvent retention factor})]$ for each ink/coating/fountain solution, plus $(e) * (f)$ for each cleanup material], in pounds and tons per month;
 - h. the total VOC material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of $[(b) * (c) \text{ plus } (e) * (f)]$ for each ink, coating, fountain solution and cleanup material, in pounds and tons per month; and
 - i. the updated rolling, 12-month summation of VOC material usage and VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months).
- (2) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutants (HAPs) for the entire facility:
 - a. the name and identification number/code of each ink, coating, fountain solution, cleanup material and any other material containing any HAP;
 - b. the name of each individual HAP contained in each material applied (and identified in a. above) and the weight percent of each HAP for each HAP-containing material applied;
 - c. the number of pounds of each ink, coating, fountain solution, cleanup material, and other material applied during the month;
 - d. for each individual HAP, the total emissions from all the materials employed, in ton(s), i.e., for each individual HAP, the summation of the products of b. times c. for all the materials applied during the month, divided by 2,000 pounds;



- e. the total combined HAPs emissions from all the materials employed during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from d. above;
- f. for each individual HAP, the total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in d. above, for the present month plus the previous 11 months of operation, in ton(s); and
- g. the total combined HAP emissions during the rolling 12-month period, i.e., the summation of all HAP emissions, as recorded in e. above, for the present month plus the previous 11 months of operation, in ton(s).

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting the Cleveland Division of Air Quality (Cleveland DAQ). Material Safety Data Sheets (MSDS) typically include a listing of the solvents contained in the coatings and cleanup materials.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify:
 - a. all deviations (excursions) of the following that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month VOC emission limitation;
 - ii. all exceedances of the rolling, 12-month individual HAP emission limitation for each HAP; and
 - iii. all exceedances of the rolling, 12-month total combined HAPs emission limitation.
 - 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 Cleveland DAQ.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (3) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- f) Testing Requirements
- (1) Compliance with the emission limitation(s) in 1.c)(1) of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
VOC emissions shall not exceed 97.1 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined by the record keeping and reporting specified in e) and f).
 - b. Emission Limitation:
Individual HAP emissions shall not exceed 9.9 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined by therecord keeping and reporting specified in e) and f).
 - c. Emission Limitation:
Combined HAP emissions shall not exceed 24.9 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined by therecord keepingand reporting specified in e) and f).



Final Permit-to-Install and Operate
GRAPHIC PACKAGING INTERNATIONAL, INC
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- g) Miscellaneous Requirements
 - (1) None.



Final Permit-to-Install and Operate
GRAPHIC PACKAGING INTERNATIONAL, INC
Permit Number: P0117951
Facility ID: 1318532181
Effective Date: 3/20/2015

C. Emissions Unit Terms and Conditions



1. K008, Sheetfed Offset Press KBA97

Operations, Property and/or Equipment Description:

Non-heatset, sheetfed, offset lithographic printing press

- 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. g)(3)
 - (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)a., d)(2), e)(1), f)(1)a., and g)(2)
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(2) (Synthetic Minor to avoid Title V) (PTI #13-3300, issued August 6, 1997)	VOC emissions from this emissions unit shall not exceed: 91.7 pounds/hour (lbs/hr); and 76.9 tons/rolling, 12-month period See b)(2)a.below.
b.	OAC rule 3745-21-22	Reasonably available control technology (RACT), see b)(2)b.-d., c)(1)-(2), d)(1)d.-e., d)(3)-(5), e)(2), f)(1)b.-e., and g(1)a. below.
c.	OAC rule 3745-114-01	See g)(3). below.



(2) Additional Terms and Conditions

- a. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit. The emission of VOC(s) from this emissions unit shall not exceed 76.9tpy, based upon a rolling, 12-month summation of the emissions.
- b. If the fountain solution contains only alcohol substitutes, the permittee shall maintain the as-applied VOC content at or below 5.0%, by weight.
- c. If the fountain solution contains alcohol, the permittee shall:
 - i. maintain the as-applied VOC content below 5.0%, by weight; or
 - ii. maintain the as-applied VOC content at or below 8.5% by weight, and refrigerate the fountain solution to 60 degrees Fahrenheit or less.
- d. The permittee shall meet one of the following requirements for each cleaning solution used for cleaning on the emissions unit:
 - i. maintain the as-applied VOC content at or below 70%, by weight; or
 - ii. maintain the as-applied VOC composite partial vapor pressure at or below 10 mmHg at 20 degrees Celsius (68 degrees Fahrenheit).

The use of cleaning solutions not meeting the specifications of d.i. and d.ii. is permitted provided that the quantity used does not exceed 110 gallons over any consecutive 12-month period.

- e. The hourly VOC emissions limit was established to reflect the potential to emit (PTE) for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation.

c) Operational Restrictions

- (1) The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operations.
- (2) The permittee shall keep all solvent-laden shop towels in closed containers when not being used.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, fountain solution and cleanup material;



- b. the amount, in pounds, of each ink, coating, fountain solution and cleanup material employed;
 - c. the VOC content of each ink, coating, fountain solution and cleanup material employed, in weight percent;
 - d. the VOC content or VOC composite partial vapor pressure of all cleaning materials employed in all the lithographic printing operations; and
 - e. the total amount, in pounds, of all the cleanup materials employed that exceed the allowable VOC content or VOC composite vapor pressure.
- (2) The permittee shall calculate (see g)(2) below) and maintain monthly records of the VOC emissions and the rolling 12-month emissions of VOC.
- (3) For a fountain solution containing alcohol, when adding alcohol to a batch previously tested in accordance with OAC rule 3745-21-22(F)(2), the permittee shall measure the VOC (alcohol) content of any altered fountain solution, at the time of alteration, in percent weight, of the fountain solution employed in the press:
- a. The alcohol content of the fountain solution shall be measured using a hydrometer. The hydrometer shall have a visual, analog, or digital readout with an accuracy of 0.5 percent.
 - b. A standard solution shall be used to calibrate the hydrometer for the type of alcohol used in the fountain solution.
 - c. The permittee shall maintain records of the results of the measurements at the facility for a period of five years.
- (4) For a fountain solution that contains alcohol and is refrigerated to comply with condition b)(2)(c)(ii):
- a. measure on a daily basis the temperature, in degrees Fahrenheit, of the fountain solution; and
 - b. maintain records of the results of the measurements at the facility for a period of five years.
- (5) The permittee shall maintain records of the following information for each batch of fountain solution prepared for use in the emissions unit:
- a. 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 US EPA Method 24;
 - b. the volume of alcohol added to make the batch of fountain solution;
 - c. the volume of water added to make the batch of fountain solution;
 - d. the calculated VOC content of the final, mixed batch; and



e. the date and time the batch was prepared.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify:

- a. all deviations (excursions) of the following that restrict the PTE of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month limitation for VOC emissions;
- 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 Cleveland DAQ.

(2) The permittee shall notify the Cleveland DAQ of the following exceedances. Each notification shall be submitted to the Cleveland DAQ within forty-five days after the instance occurs, and it shall include a copy of the record showing the instance.

- a. each hydrometer measurement of the fountain solution that shows an exceedance of the applicable alcohol content limitation specified in b)(2)b. or c.;
- b. each temperature reading of the fountain solution that shows an exceedance of the temperature limitation specified in b)(2)c.;
- c. each calculated VOC content of the fountain solution that exceeds the VOC content limitation specified in b)(2)c.; and
- d. each instance when an exceedance of the VOC content or VOC composite partial vapor pressure as specified for each cleaning material in b)(2)d..

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.



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

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 76.9 tons/rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by the record keeping and reporting specified in d) and e).

b. Emission Limitation:

If the fountain solution contains only alcohol substitutes the as-applied VOC content must be maintained below 5.0 %, by weight.

Applicable Compliance Method:

The as-applied VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(2).

c. Emission Limitation:

If the fountain solution contains alcohol:

i. maintain the as-applied VOC content below 5.0%, by weight; or

ii. maintain the as-applied VOC content at or below 8.5% by weight, and refrigerate the fountain solution to 60 degrees Fahrenheit or less.

Applicable Compliance Method(s):

The as-applied VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(2).



The temperature requirement shall be met using a thermometer or other temperature detection device capable of reading to 0.5 degrees Fahrenheit.

- d. Emission Limitation:
The VOC content of each cleaning solution shall be maintained at or below 70% by weight, as applied.

Applicable Compliance Method:

The VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(4).

- e. Emission Limitation:
The VOC composite partial vapor pressure of each cleaning solution shall be maintained at or below 10 mmHg at 68 degrees Fahrenheit, as applied.

Applicable Compliance Method:

The VOC content shall be determined by one of the methods outlined in OAC rule 3745-21-22(F)(5).

g) Miscellaneous Requirements

- (1) The potential to emit VOC from this emissions unit was established based on the following calculation:

Calculations for Inks and Cleanup Materials:

$(\text{hourly usage in lbs/hr})(\% \text{ VOC})(100\% - \text{VOC retention factor}) = \text{lbs VOC/hr}$

Calculations for Coating/Fountain Solution:

$(\text{hourly usage in lbs/hr})(\% \text{ VOC}) = \text{lbs VOC/hr}$

Total Emissions in lbs/hr:

$(\text{Ink lbs VOC/hr}) + (\text{Coating lbs VOC/hr}) + (\text{Fountain Solution lbs VOC/hr}) + (\text{Cleanup lbs VOC/hr}) = \text{total lbs VOC/hr}$

- a. For purposes of determining VOC emissions, the following shall be used:
 - i. 95% VOC retention factor shall be used for sheet-fed inks printed on absorptive substrates, meaning 5% of the VOC in the ink is emitted during the printing process;
 - ii. 50% VOC retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a VOC composite vapor pressure of no more than 10 mmHg at 20 degrees Celsius (68 degrees Fahrenheit) if the contaminated shop towels are kept in closed containers, meaning 50% of the VOC used on the shop towels is emitted during the cleaning process.

If the permittee sends waste-off site for waste disposal, the permittee may take a credit for that in emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from the emissions unit.



- (2) The monthly VOC emission rate shall be calculated using the following equations:

Calculations for Inks and Cleanup Materials:

$(\text{monthly usage in lbs/month})(\% \text{ VOC})(100\% - \text{VOC retention factor}) = \text{lbs VOC/month}$

Calculations for Coating/Fountain Solution:

$(\text{monthly usage in lbs/month})(\% \text{ VOC}) = \text{lbs VOC/month}$

Total Emissions in lbs/hr:

$(\text{Ink lbs VOC/month}) + (\text{Coating lbs VOC/month}) + (\text{Fountain Solution lbs VOC/month}) + (\text{Cleanup lbs VOC/month}) = \text{total lbs VOC/month}$

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



2. K009, Sheetfed Offset Press KBA972

Operations, Property and/or Equipment Description:

Non-heatset, sheetfed, offset lithographic printing press

- 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. g)(3)
 - (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)(a., d)(2), e)(1), f)(1)a., and g)(2)
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(2) (Synthetic Minor to avoid Title V) (PTI #13-3300, issued August 6, 1997)	VOC emissions from this emissions unit shall not exceed: 91.7 pounds/hour (lbs/hr); and 76.9 tons/rolling, 12-month period See b)(2)a. below.
b.	OAC rule 3745-21-22	Reasonably available control technology (RACT), see b)(2)b.-d., c)(1)-(2), d)(1)d.-e., d)(3)-(5), e)(2), f)(1)b.-e., and g(1)a. below.
c.	OAC rule 3745-114-01	See g)(3). below.



(2) Additional Terms and Conditions

- a. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit. The emission of VOC(s) from this emissions unit shall not exceed 76.9 tons per year (tpy), based upon a rolling, 12-month summation of the emissions.
- b. If the fountain solution contains only alcohol substitutes the permittee shall maintain the as-applied VOC content at or below 5.0%, by weight.
- c. If the fountain solution contains alcohol the permittee shall:
 - i. maintain the as-applied VOC content below 5.0%, by weight; or
 - ii. maintain the as-applied VOC content at or below 8.5% by weight, and refrigerate the fountain solution to 60 degrees Fahrenheit or less.
- d. The permittee shall meet one of the following requirements for each cleaning solution used for cleaning on the emissions unit:
 - i. maintain the as-applied VOC content at or below 70%, by weight; or
 - ii. maintain the as-applied VOC composite partial vapor pressure at or below 10 mmHg at 20 degrees Celsius (68 degrees Fahrenheit).

The use of cleaning solutions not meeting the specifications of (2)d. is permitted provided that the quantity used does not exceed 110 gallons over any consecutive 12-month period.

- e. The hourly VOC emissions limit was established to reflect the potential to emit (PTE) for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation.

c) Operational Restrictions

- (1) The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operations.
- (2) The permittee shall keep all solvent-laden shop towels in closed containers when not being used.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, fountain solution and cleanup material;



- b. the amount, in pounds, of each ink, coating, fountain solution and cleanup material employed;
 - c. the VOC content of each ink, coating, fountain solution and cleanup material employed, in percent weight;
 - d. the VOC content or VOC composite partial vapor pressure of all cleaning materials employed in all the lithographic printing operations; and
 - e. the total amount, in pounds, of all the cleanup materials employed that exceed the allowable VOC content or VOC composite vapor pressure.
- (2) The permittee shall calculate (see g)(2) below) and maintain monthly records of the VOC emissions and the rolling 12-month emissions of VOC.
- (3) For a fountain solution containing alcohol, when adding alcohol to a batch previously tested in accordance with OAC rule 3745-21-22 (F)(2), the permittee shall measure the VOC (alcohol) content of any altered fountain solution, at the time of alteration, in percent weight, of the fountain solution employed in the press:
- a. The alcohol content of the fountain solution shall be measured using a hydrometer. The hydrometer shall have a visual, analog, or digital readout with an accuracy of 0.5 percent.
 - b. A standard solution shall be used to calibrate the hydrometer for the type of alcohol used in the fountain solution.
 - c. The permittee shall maintain records of the results of the measurements at the facility for a period of five years.
- (4) For a fountain solution that contains alcohol and is refrigerated to comply with condition b)(2)(c)(ii):
- a. measure on a daily basis the temperature, in degrees Fahrenheit, of the fountain solution; and
 - b. maintain records of the results of the measurements at the facility for a period of five years.
- (5) The permittee shall maintain records of the following information for each batch of fountain solution prepared for use in the emissions unit:
- a. 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 US EPA Method 24;
 - b. the volume of alcohol added to make the batch of fountain solution;
 - c. the volume of water added to make the batch of fountain solution;
 - d. the calculated VOC content of the final, mixed batch; and



e. the date and time the batch was prepared.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify:

- a. all deviations (excursions) of the following that restrict the PTE of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month limitation for VOC emissions;
- 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 Cleveland DAQ.

- (2) The permittee shall notify the Cleveland DAQ of the following exceedances. Each notification shall be submitted to the Cleveland DAQ within forty-five days after the instance occurs, and it shall include a copy of the record showing the instance:
 - a. each hydrometer measurement of the fountain solution that shows an exceedance of the applicable alcohol content limitation specified in b)(2)b. or c.;
 - b. each temperature reading of the fountain solution that shows an exceedance of the temperature limitation specified in b)(2)c.;
 - c. each calculated VOC content of the fountain solution that exceeds the VOC content limitation specified in b)(2)c.; and
 - d. each instance when an exceedance of the VOC content or VOC composite partial vapor pressure as specified for each cleaning material in b)(2)d..
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (4) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio



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

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 76.9 tons/rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by the record keeping and reporting specified in d) and e).

b. Emission Limitation:

If the fountain solution contains only alcohol substitutes the as-applied VOC content must be maintained below 5.0 %, by weight.

Applicable Compliance Method:

The as-applied VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(2).

c. Emission Limitation:

If the fountain solution contains alcohol:

i. maintain the as-applied VOC content below 5.0%, by weight; or

ii. maintain the as-applied VOC content at or below 8.5% by weight, and refrigerate the fountain solution to 60 degrees Fahrenheit or less.

Applicable Compliance Methods:

The as-applied VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(2).

The temperature requirement shall be met using a thermometer or other temperature detection device capable of reading to 0.5 degrees Fahrenheit.



- d. Emission Limitation:
The VOC content of each cleaning solution shall be maintained at or below 70% by weight, as applied.

Applicable Compliance Method:

The VOC content shall be determined by one of the methods outlined in OAC 3745-21-22(F)(4).

- e. Emission Limitation:
The VOC composite partial vapor pressure of each cleaning solution shall be maintained at or below 10 mmHg at 68 degrees Fahrenheit, as applied.

Applicable Compliance Method:

The VOC content shall be determined by one of the methods outlined in OAC rule 3745-21-22(F)(5).

g) Miscellaneous Requirements

- (1) The potential to emit VOC from this emissions unit was established based on the following calculation:

Calculations for Inks and Cleanup Materials:

$(\text{hourly usage in lbs/hr})(\% \text{ VOC})(100\% - \text{VOC retention factor}) = \text{lbs VOC/hr}$

Calculations for Coating/Fountain Solution:

$(\text{hourly usage in lbs/hr})(\% \text{ VOC}) = \text{lbs VOC/hr}$

Total Emissions in lbs/hr:

$(\text{Ink lbs VOC/hr}) + (\text{Coating lbs VOC/hr}) + (\text{Fountain Solution lbs VOC/hr}) + (\text{Cleanup lbs VOC/hr}) = \text{total lbs VOC/hr}$

- a. For purposes of determining VOC emissions, the following shall be used:
- i. 95% VOC retention factor shall be used for sheet-fed inks printed on absorptive substrates, meaning 5% of the VOC in the ink is emitted during the printing process;
 - ii. 50% VOC retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a VOC composite vapor pressure of no more than 10 mmHg at 20 degrees Celsius (68 degrees Fahrenheit) if the contaminated shop towels are kept in closed containers, meaning 50% of the VOC used on the shop towels is emitted during the cleaning process.

If the permittee sends waste-off site for waste disposal, the permittee may take a credit for that in emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from the emissions unit.



- (2) The monthly VOC emission rate shall be calculated using the following equations:

Calculations for Inks and Cleanup Materials:

$(\text{monthly usage in lbs/month})(\% \text{ VOC})(100\% - \text{VOC retention factor}) = \text{lbs VOC/month}$

Calculations for Coating/Fountain Solution:

$(\text{monthly usage in lbs/month})(\% \text{ VOC}) = \text{lbs VOC/month}$

Total Emissions in lbs/hr:

$(\text{Ink lbs VOC/month}) + (\text{Coating lbs VOC/month}) + (\text{Fountain Solution lbs VOC/month}) + (\text{Cleanup lbs VOC/month}) = \text{total lbs VOC/month}$

- (3) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified federally enforceable permit-to-install and operate (FEPTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.



3. K010, Flexographic unit No. 1

Operations, Property and/or Equipment Description:

Flexographic printing unit equipped with one printing station equipped with natural gas-fired dryer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-3333 issued November 19, 1997)	See b)(2)a. and b)(2)b. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(Y).
b.	OAC rule 3745-21-09(Y)	The VOC content of the coatings and inks employed in this emissions unit shall not exceed 40 percent VOC by volume of the coating and ink, excluding water and exempt solvents; or 25 percent by volume of the volatile matter in the coating and ink.
c.	OAC rule 3745-21-09(Y)(4)(a)(ii)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to c)(1)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		and c)(3).

(2) Additional Terms and Conditions

- a. VOC emissions shall not exceed 87.1 pounds/hour.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

- b. VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

c) Operational Restrictions

- (1) The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month weighted average.
- (2) The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.
- (3) The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month weighted average.
- (4) The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.
- (5) The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the monthly cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.
- (6) The permittee shall store all spent VOC containing cleaning materials and cleaning rags in covered containers.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, and cleanup material employed;



- b. the amount of each ink, coating, and cleanup material employed, in pounds;
 - c. the VOC content of each ink, coating, and cleanup material employed, in percent by weight;
 - d. the VOC content of the coatings and inks in percent VOC by volume of the coating and ink, excluding water and exempt solvents; or the percent VOC by volume of the volatile matter in the coating and ink;
 - e. the total VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons (based on a 7 percent organic solvent retention for inks and 100 percent solvent evaporation for coatings and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take credit for that in the emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from this emissions unit) determined by using the formula in f)(1)b.(excluding dividing by hours) plus the summation of b. x c. for cleanup materials ;
 - f. the rolling, 12-month summation of ink usage, in pounds;
 - g. the rolling, 12-month summation of coating usage, in pounds;
 - h. the rolling, 12-month summation of solvent-based cleanup material usage, in pounds;
 - i. the rolling, 12-month weighted average VOC content for all inks, in percent, by weight (i.e., the sum of the pounds of each ink, multiplied by the OC content weight percent of each ink, and divided by the total pounds of all inks for the rolling, 12-month period);
 - j. the rolling, 12-month weighted average VOC content for all coatings, in percent, by weight (i.e., the sum of the pounds of each coating, multiplied by the OC content weight percent of each coating, and divided by the total pounds of all coatings for the rolling, 12-month period); and
 - k. the rolling, 12-month summation of VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons.
- e) Reporting Requirements
- (1) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month.
 - (2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the following for this emissions unit:
 - a. the rolling, 12-month usage limitations for inks, coatings, and solvent-based cleanup materials, in pounds;



- b. the rolling, 12-month weighted average VOC content limitations for all inks and coatings; and
- c. the rolling, 12-month VOC emission limitation for all inks, coatings, and cleanup materials.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

- (3) The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
 - (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (5) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
The VOC content of the inks and coatings shall not exceed 40 percent VOC by volume, excluding water and exempt solvents, or 25 percent by volume of the volatile matter.



Applicable Compliance Method:

Compliance with the applicable emission limitation shall be determined based upon the records required pursuant to d)(1).

b. Emission Limitation:

VOC emissions shall not exceed 87.1 pounds/hour.

Applicable Compliance Method:

This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, and cleanup material usage rates by the worst case OC contents for the coatings, inks, and cleanup materials. The hourly potential to emit for this emissions unit shall be verified based upon the records required pursuant to d)(1) and use of the following equation:

$$HE = \text{Sum} [m_{use\ i}, * \text{VOC \% } i * (100-RF)] / MH$$

Where:

HE = hourly emissions, in pounds per hour;

i = subscript denoting individual coating;

m_{use} = monthly usage of each individual coating or ink, in pounds/month

VOC% =VOC content for each individual material, in weight percent;

RF = retention factor, 7% for ink and 0% for coating;

MH =total hours the press was in operation during the month

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

c. Emission Limitation:

VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

d. Emission Limitation:

The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

e. Emission Limitation:

The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.



Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

f. Emission Limitation:

The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

g. Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

h. Emission Limitation:

The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

- (2) Formulation data or USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

g) Miscellaneous Requirements

- (1) None.



4. K011, Flexographic unit No. 2

Operations, Property and/or Equipment Description:

flexographic printing unit equipped with natural gas-fired dryer

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-3414 issued June 24, 1998)	See b)(2)a. and b)(2)b. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(Y).
b.	OAC rule 3745-21-09(Y)	The VOC content of the coatings and inks employed in this emissions unit shall not exceed 40 percent VOC by volume of the coating and ink, excluding water and exempt solvents; or 25 percent by volume of the volatile matter in the coating and ink.
c.	OAC rule 3745-21-09(Y)(4)(a)(ii)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to c)(1)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		and c)(3).

(2) Additional Terms and Conditions

- a. VOC emissions shall not exceed 87.1 pounds/hour.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

- b. VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

c) Operational Restrictions

- (1) The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month weighted average.
- (2) The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.
- (3) The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month weighted average.
- (4) The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.
- (5) The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the monthly cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.
- (6) The permittee shall store all spent VOC containing cleaning materials and cleaning rags in covered containers.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, and cleanup material employed;



- b. the amount of each ink, coating, and cleanup material employed, in pounds;
 - c. the VOC content of each ink, coating, and cleanup material employed, in percent by weight;
 - d. the VOC content of the coatings and inks in percent VOC by volume of the coating and ink, excluding water and exempt solvents, or the percent VOC by volume of the volatile matter in the coating and ink;
 - e. the total VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons (based on a 7 percent organic solvent retention for inks and 100 percent solvent evaporation for coatings and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take credit for that in the emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from this emissions unit) determined by using the formula in f)(1)b.(excluding dividing by hours) plus the summation of b. x c. for cleanup materials;
 - f. the rolling, 12-month summation of ink usage, in pounds;
 - g. the rolling, 12-month summation of coating usage, in pounds;
 - h. the rolling, 12-month summation of solvent-based cleanup material usage, in pounds;
 - i. the rolling, 12-month weighted average VOC content for all inks, in percent, by weight (i.e., the sum of the pounds of each ink, multiplied by the OC content weight percent of each ink, and divided by the total pounds of all inks for the rolling, 12-month period);
 - j. the rolling, 12-month weighted average VOC content for all coatings, in percent, by weight (i.e., the sum of the pounds of each coating, multiplied by the OC content weight percent of each coating, and divided by the total pounds of all coatings for the rolling, 12-month period); and
 - k. the rolling, 12-month summation of VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons.
- e) Reporting Requirements
- (1) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month.
 - (2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the following for this emissions unit:
 - a. the rolling, 12-month usage limitations for inks, coatings, and solvent-based cleanup materials, in pounds;



- b. the rolling, 12-month weighted average VOC content limitations for all inks and coatings; and
- c. the rolling, 12-month VOC emission limitation for all inks, coatings, and cleanup materials.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

- (3) The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (5) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
The VOC content of the inks and coatings shall not exceed 40 percent VOC by volume, excluding water and exempt solvents, or 25 percent by volume of the volatile matter.



b. Applicable Compliance Method:
Compliance with the applicable emission limitation shall be determined based upon the records required pursuant to d)(1).

c. Emission Limitation:
VOC emissions shall not exceed 87.1 pounds/hour.

Applicable Compliance Method:
This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, and cleanup material usage rates by the worst case OC contents for the coatings, inks, and cleanup materials. The hourly potential to emit for this emissions unit shall be verified based upon the records required pursuant to d)(1) and use of the following equation:

$$HE = \text{Sum} [\text{muse } i, * \text{ VOC } \% i * (100\text{-RF})] / \text{MH}$$

Where:

HE = hourly emissions, in pounds per hour;

i = subscript denoting individual coating;

muse = monthly usage of each individual coating or ink, in pounds/month

VOC% =VOC content for each individual material, in weight percent;

RF = retention factor, 7% for ink and 0% for coating;

MH =total hours the press was in operation during the month

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

d. Emission Limitation:
VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

Applicable Compliance Method:
Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

e. Emission Limitation:
The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month weighted average.

Applicable Compliance Method:
Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

f. Emission Limitation:
The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.



Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

g. Emission Limitation:

The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

h. Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

i. Emission Limitation:

The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to d)(1).

- (2) Formulation data or USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

g) Miscellaneous Requirements

- (1) None.



5. P001, Asitrade Corrugating Machine 1

Operations, Property and/or Equipment Description:

Asitrade corrugating machine with capability to glue pre-printed sheet or pre-printed web

- 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)(2), d)(3), d)(4) and d)(5).
 - (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. None.
- b) **Applicable Emissions Limitations and/or Control Requirements**
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-3564 issued April 20, 2000)	8.58 pounds/hour of VOC emissions (See b)(2)a. below.) 15.0 tons of VOC emissions per rolling, 12-month period
b.	OAC rule 3745-21-09(F)	The VOC content, as applied, of each coating (adhesive) employed shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.

- (2) **Additional Terms and Conditions**
 - a. This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.



- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record the following information each month:
 - a. the company name and identification number of each adhesive, as applied;
 - b. the amount of each adhesive employed, in pounds;
 - c. the VOC content of each adhesive, in weight percent, as applied;
 - d. the VOC content of each adhesive (excluding water and exempt solvents), in pounds/gallon, as applied;
 - e. the total VOC emissions for all adhesives, in pounds and tons (based on a 100 percent VOC evaporation rate) determined from the summation of b. x c. for all adhesives applied; and
 - f. the rolling, 12-month summation of the VOC emissions, in tons.
 - (2) The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - a. Pollutant: Vinyl Acetate
TLV (ug/m3): 35000
Maximum Hourly Emission Rate (lbs/hr):0.41
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.88
MAGLC (ug/m3): 833
 - b. Pollutant: Methyl Alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.32
MAGLC (ug/m3): 6238
 - c. Pollutant: Formaldehyde
TLV (ug/m3): 370
Maximum Hourly Emission Rate (lbs/hr): 0.10



Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.98
MAGLC (ug/m3): 9

- d. Pollutant: Toluene
TLV (ug/m3): 188000
Maximum Hourly Emission Rate (lbs/hr): 0.03
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.54
MAGLC (ug/m3): 4476
- e. Pollutant: Acetaldehyde
TLV (ug/m3): 45000
Maximum Hourly Emission Rate (lbs/hr): 0.02
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.83
MAGLC (ug/m3): 1071
- f. Pollutant: Ethylene Glycol
TLV (ug/m3): 100000
Maximum Hourly Emission Rate (lbs/hr): 0.01
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.58
MAGLC (ug/m3): 2381
- g. Pollutant: Hydroquinone
TLV (ug/m3): 2000
Maximum Hourly Emission Rate (lbs/hr): 0.001
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.09
MAGLC (ug/m3): 48

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

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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



- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (5) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- f) **Testing Requirements**
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
2.9 lbs of VOC/gallon coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to d)(1).
 - b. Emission Limitation:
8.58 pounds/hour of VOC emissions

Applicable Compliance Method:
This emission limitation was established by multiplying the emissions unit's maximum hourly adhesive application rate by the worst case adhesive VOC content. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.
 - c. Emission Limitation:
15.0 tons of VOC emissions/rolling, 12-month period

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to d)(1).



- (2) Formulation data or USEPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.
- g) Miscellaneous Requirements
- (1) None.



6. P002, Asitrade Corrugating Machine 2

Operations, Property and/or Equipment Description:

Asitrade corrugating machine with capability to glue pre-printed sheet or pre-printed web

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)(2), d)(3), d)(4) and d)(5).

(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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-3564 issued March 28, 2001)	8.58 pounds/hour of VOC emissions (See b)(2)a. below.) 15.0 tons of VOC emissions per rolling, 12-month period
b.	OAC rule 3745-21-09(F)	The VOC content, as applied, of each coating (adhesive) employed shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.

(2) Additional Terms and Conditions

a. This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.



- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record the following information each month:
 - a. the company name and identification number of each adhesive, as applied;
 - b. the amount of each adhesive employed, in pounds;
 - c. the VOC content of each adhesive, in weight percent, as applied;
 - d. the VOC content of each adhesive (excluding water and exempt solvents), in pounds/gallon, as applied;
 - e. the total VOC emissions for all adhesives, in pounds and tons (based on a 100 percent VOC evaporation rate) determined from the summation of b. x c. for all adhesives applied; and
 - f. the rolling, 12-month summation of the VOC emissions, in tons.
 - (2) The permit to install for this emissions unit P002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - a. Pollutant: Vinyl Acetate
TLV (ug/m3): 35000
Maximum Hourly Emission Rate (lbs/hr):0.41
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.88
MAGLC (ug/m3): 833
 - b. Pollutant: Methyl Alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.32
MAGLC (ug/m3): 6238
 - c. Pollutant: Formaldehyde
TLV (ug/m3): 370
Maximum Hourly Emission Rate (lbs/hr): 0.10



Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.98
MAGLC (ug/m3): 9

- d. Pollutant: Toluene
TLV (ug/m3): 188000
Maximum Hourly Emission Rate (lbs/hr): 0.03
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.54
MAGLC (ug/m3): 4476
- e. Pollutant: Acetaldehyde
TLV (ug/m3): 45000
Maximum Hourly Emission Rate (lbs/hr): 0.02
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.83
MAGLC (ug/m3): 1071
- f. Pollutant: Ethylene Glycol
TLV (ug/m3): 100000
Maximum Hourly Emission Rate (lbs/hr): 0.01
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.58
MAGLC (ug/m3): 2381
- g. Pollutant: Hydroquinone
TLV (ug/m3): 2000
Maximum Hourly Emission Rate (lbs/hr): 0.001
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.09
MAGLC (ug/m3): 48

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

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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



- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (5) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
2.9 lbs of VOC/gallon coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to d)(1).
 - b. Emission Limitation:
8.58 pounds/hour of VOC emissions

Applicable Compliance Method:
This emission limitation was established by multiplying the emissions unit's maximum hourly adhesive application rate by the worst case adhesive VOC content. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.
 - c. Emission Limitation:
15.0 tons of VOC emissions/rolling, 12-month period

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to d)(1).



- (2) Formulation data or USEPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

- g) Miscellaneous Requirements
 - (1) None.